

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:

AMENDMENTS TO 35 ILL. ADM.
CODE PARTS 201, 202, AND 212

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R2023-018A
(Rulemaking – Air)

NOTICE OF FILING

To: Attached Service List

PLEASE TAKE NOTICE that today I have electronically filed with the Office of the Clerk of the Illinois Pollution Control Board the **STATEMENT OF REASONS OF DYNEGY AND MIDWEST GENERATION** and a **CERTIFICATE OF SERVICE**, which are attached and copies of which are herewith served upon you.

Dated: August 7, 2023

Respectfully submitted,

Dynegy Midwest Generation, LLC; Illinois
Power Generating Company; and Kincaid
Generation, LLC

Midwest Generation, LLC

/s/ Samuel A. Rasche
One of their Attorneys

Joshua R. More
Amy Antonioli
Samuel A. Rasche
ARENTFOX SCHIFF LLP
233 South Wacker Drive, Suite 7100
Chicago, Illinois 60606
(312) 258-5500
Joshua.More@afslaw.com
Amy.Antonioli@afslaw.com
Sam.Rasche@afslaw.com

Andrew N. Sawula
ARENTFOX SCHIFF LLP
One Westminster Place, Suite 200
Lake Forest, Illinois 60045
(847) 295-4336
Andrew.Sawula@afslaw.com

Attorneys for Dynegy and Midwest Generation

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STATEMENT OF REASONS OF DYNEGY AND MIDWEST GENERATION

Dynegy Midwest Generation, LLC; Illinois Power Generating Company; and Kincaid Generation, LLC (collectively, “Dynegy”) and Midwest Generation, LLC (“MWG”) (collectively, the “Companies”) by their attorneys, ArentFox Schiff LLP, and pursuant to 35 Ill. Adm. Code §§ 102.200 and 102.202,¹ Sections 10, 27, and 28 of the Environmental Protection Act (“Act”), 415 Ill. Comp. Stat. 5/27 and 28, the Companies propose a narrowly tailored amendment in order to establish alternative emission limitations (“AELs”) for each Company’s remaining operating coal-fired boilers (the “Affected Units”) at their Illinois power stations (the “Stations”) during periods of startup, malfunction, and breakdown (“SMB”). The Companies previously presented the same proposal in the main docket (R2023-018). The Companies appreciate the Illinois Pollution Control Board’s (“Board”) consideration of their proposal.

In support of their proposal and pursuant to Section 102.202(b) (the Board waived the 200-person signature requirement of Section 102.202(g) in its July 6, 2023 order in this subdocket), the Companies state as follows:

I. BACKGROUND

¹ Subsequent references to the Board’s rules will be by section number only.

On December 7, 2022, the Illinois Environmental Protection Agency (“IEPA”) filed a proposed rule amending Parts 201, 202, and 212 of Title 35 (Environmental Protection) of Illinois’s Administrative Code. *In the Matter of: Amendments to 35 Ill. Adm. Code Parts 201, 202, and 212*, R2023-018 (hereinafter “SMB Repeal” or “R23-18”). IEPA filed the rulemaking with the Board under Illinois’s fast-track rulemaking process for “rules proposed by IEPA and required to be adopted by the State under the Clean Air Act.” 415 Ill. Comp. Stat. 5/28.5.

The Board adopted IEPA’s proposal to remove certain provisions from Parts 201 and 212 that, in some circumstances, allowed sources to exceed emissions standards in Illinois during SMB events. Statement of Reasons (“IEPA SOR”) at 30 (Dec. 7, 2022), R23-18; *see, e.g.*, 35 Ill. Admin. Code §§ 201.261, 201.262, 201.263, 201.264, 201.265, 212.124(a). In adopting the SMB Repeal, the Board relied upon IEPA statements that its proposal corrected State Implementation Plan (“SIP”) deficiencies and brought the Illinois air pollution rules in line with federal startup, shutdown, and malfunction (“SSM”) policies and the Clean Air Act (“CAA”), and therefore must be adopted.² Opinion and Order of the Board: Proposed Rule; Second Notice (“Second Notice Opinion”) at 4, 15, 16 (Apr. 6, 2023), R23-18; IEPA SOR at 12.

² The federal SSM policies are themselves subject to ongoing litigation. In 2015, the United States Environmental Protection Agency (“U.S. EPA”) determined that several state SSM provisions were inconsistent with the CAA and must be revised. *See* Section IV.A. *infra*. A broad group of states and industry members (including certain Dynegy affiliates) challenged that determination as beyond U.S. EPA’s authority under the CAA. *See Environmental Committee of the Florida Elec. Power Coordinating Group, Inc. v. Environmental Protection Agency*, Case No. 15-1239 (D.C. Cir.). Oral arguments were held in March 2022; however, no decision has been issued, and the case remains pending before the D.C. Circuit Court of Appeals. Should federal courts ultimately find in favor of the industry groups, IEPA’s basis for repealing the Illinois SSM provisions could be invalidated.

IEPA argued that it based its proposal on recent U.S. EPA decisions and statements related to SIPs that include exemptions, discretionary exceptions, or affirmative defenses related to exceedances that occur during SMB. *See generally* IEPA SOR. The Companies submitted a joint comment, supported by written and oral testimony, requesting the same relief they now request in this sub-docket. Joint Post Hearing Comment of Dynegy and Midwest Generation (“Joint Comment”) (Mar. 7, 2023), R23-18.³ The Board declined to consider the Companies’ proposal, or any of the proposals submitted by other participants, for AELs that would apply during SMB periods, stating it had no authority to do so as part of the fast-track SMB Repeal. Second Notice Opinion at 22. However, the Board recognized that it has authority to review and approve specific proposals for AELs that would apply during SMB events, and it opened this sub-docket to consider those proposals. *Id.*

In this sub-docket, the Companies propose to codify AELs during SMB events, utilizing an alternative averaging period and a limit on the maximum opacity level, to address U.S. EPA’s 2015 Final SIP Call (the “Joint Proposal”). This is intuitively and demonstrably more stringent than the current SMB authorizations in the Stations’ Clean Air Act Permitting Program (“CAAPP”) permits and the Illinois SIP, which allow operations in excess of the applicable opacity standards during SMB events.

The Joint Proposal would be codified as a new subsection to 35 Ill. Admin. Code § 212.124. It complements the SMB Repeal as an additional revision to the regulations, simply adding a new provision to the regulations; it would not require any change to any of the regulatory language adopted through the SMB Repeal.

This Statement of Reasons is organized as follows:

³ The Joint Comment is attached to this Statement of Reasons as **Exhibit 2**

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II. JOINT PROPOSAL LANGUAGE
(Section 102.202(a))

In R23-18, Dynegy and MWG presented nearly identical proposals through their witnesses’ prefiled testimony. *Compare* Prefiled Testimony of Cynthia Vodopivec (“Vodopivec Prefiled Testimony”) at 17–19 (Feb. 6, 2023), R23-18 *with* Prefiled Testimony of Sharene Shealey (“Shealey Prefiled Testimony”) at 10–12 (Feb. 6, 2023), R23-18.⁴ The proposals differed only with respect to which boilers were included and which opacity standard (20% or 30%) applied. The Companies combined their proposals into a Joint Proposal in the main docket, which the Companies resubmit in this sub-docket, and have attached to this Statement of Reasons as **Exhibit 1**.⁵

The Joint Proposal would supplement the applicability of a general rule to the Affected Units. Section 201.149, as amended by the SMB Repeal, specifically allows the operation of emission sources above generally applicable standards and limitations (like the state’s opacity standards) during SMB events, so long as such permission is “specifically provided for by such standard or limitation.” That is precisely what the Joint Proposal would do.

The Joint Proposal would apply to the Companies’ Illinois coal fired boilers (the “Affected Units”). Under the Joint Proposal, if the Affected Units could not demonstrate

⁴ The Prefiled Testimonies of Cynthia Vodopivec and Sharene Shealey are attached to this Statement of Reasons as **Exhibit 3** and **Exhibit 4**, respectively.

⁵ The only change the Companies made to the Joint Proposal was an update to the numbering. Whereas the Companies originally numbered this provision Section 212.124(e), they have renumbered the provision to be Section 212.124(d), in recognition of the change in numbering included in the SMB Repeal.

compliance with the applicable 20% or 30% opacity standard in Section 212.122(a) or 212.123(a) on a six-minute average basis during times of SMB, the Companies would have the option to demonstrate compliance with the same 20% or 30% opacity limitation using a three-hour averaging period (the “Alternative Averaging Period”). This would be accomplished for a given six-minute block period when the Alternative Averaging Period is needed by taking the average opacity measurements from the COMS for those six minutes and the immediately preceding 174 minutes. Examples of how this works in practice are set forth in Exhibit 7, Technical Support Document.

This Alternative Averaging Period is modeled on each Affected Unit’s compliance assurance monitoring (“CAM”) plan, set forth in its CAAPP permit, for the applicable Illinois SIP particulate matter (“PM”) limitation. Those CAM plans utilize three-hour opacity data to provide a reasonable assurance of compliance with the PM limitations promulgated to assure compliance with the various PM National Ambient Air Quality Standards (“NAAQS”).

The Joint Proposal includes recordkeeping and reporting obligations and work practice requirements that are more stringent than those required by existing Illinois regulations or by the SMB provisions in the current Illinois SIP. It would not affect any permit-specific terms that IEPA established as a condition for utilizing the SMB authorizations in the CAAPP permits for the Affected Units. The Joint Proposal would be codified as a subsection to Section 212.124, and would provide limited relief only until the Affected Units are retired. Notably, the latest planned retirement for any of the Affected Units is MWG’s planned retirement of the Powerton Affected Units on or before December 31, 2028.

III. FACTS SUPPORTING THE JOINT PROPOSAL (Section 102.202(b))

A. Overview of Affected Units, Air Quality Status, and Station CAAPP Permits

1. The Affected Units

Dynegy operates permitted coal-fired boilers at the Baldwin Energy Complex, I.D. No. 157851AAA (“Baldwin”), located at 10901 Baldwin Road, Baldwin, Illinois (Randolph County); Kincaid Power Station, I.D. No. 021814AAB (“Kincaid”), located on Route 104, four miles west of Kincaid, Illinois (Christian County); and Newton Power Station, I.D. No. 079808AAA (“Newton”), located at 6725 North 500th Street, Newton, Illinois (Jasper County). There are two permitted coal-fired boilers at Baldwin, denominated as Boilers 1 and 2, two permitted coal-fired boilers at Kincaid, denominated as Boilers 1 and 2, and one permitted coal-fired boiler at Newton, denominated as Boiler 1. Dynegy currently plans to cease operating and retire the Baldwin Affected Units on or before December 31, 2025, and to cease operating and retire the Kincaid and Newton Affected Units on or before July 17, 2027.

Baldwin Boilers 1 and 2 are served by separate stacks, Kincaid Boilers 1 and 2 are served by a single stack, and Newton Boiler 1 is served by a single stack. Opacity of emissions from the stacks at each Dynegy Station is monitored by continuous opacity monitoring systems (“COMS”). Emissions from the Baldwin and Kincaid Affected Units are controlled by numerous air pollution control equipment and measures, including the following: PM emissions are controlled by electrostatic precipitators (“ESPs”); nitrogen oxide (“NO_x”) emissions are controlled by over-fire air (“OFA”) and selective catalytic reduction (“SCR”) systems; and mercury emissions are controlled by activated carbon injection (“ACI”) systems, which injects a sorbent such as activated carbon into the flue gas

of each boiler prior to its ESP, or by burning refined coal. Further, PM emissions from the Baldwin Affected Units are also controlled by baghouses, and sulfur dioxide (“SO₂”) emissions are controlled by flue gas desulfurization (“FGD”) systems. SO₂ emissions from the Kincaid Affected Units are controlled by the use of Powder River Basin low sulfur sub-bituminous coal and a dry sorbent injection (“DSI”) FGD system, which injects a dry sorbent material such as sodium bicarbonate into the flue gas of each boiler prior to its ESP.

Emissions from Newton Boiler 1 are controlled by numerous air pollution control equipment and measures, including the following: PM emissions are controlled by an ESP equipped with a Flue Gas Conditioning (“FGC”) system, the FGC system injects SO₂ upstream of the ESP and is operated on an as-needed basis; SO₂ emissions are controlled by a DSI FGD system, which injects a dry sorbent material such as sodium bicarbonate into the flue gas prior to the ESP; NO_x emissions are controlled by low-NO_x burners and OFA systems; an ACI system controls mercury emissions by injecting a sorbent such as activated carbon into the flue gas prior to the ESP, and calcium bromide may be applied to the coal fired in the boiler from time to time to further reduce mercury emissions. *See Vodopovic Prefiled Testimony at 7.*

MWG operates permitted coal-fired boilers at Powerton Generating Station, I.D. No. 179801AAA (“Powerton”), located at 13082 East Manito Road, Pekin, IL (Tazewell County). Powerton has four coal-fired boilers, supplying steam to two electrical generators. Boilers 51 and 52 serve one generator (Unit 5), and boilers 61 and 62 power the other generator (Unit 6). MWG currently plans to cease operating and retire the Powerton Affected Units on or before December 31, 2028.

Units 5 and 6 exhaust through a common stack, and the opacity of emissions from the stack is monitored by a COMS. The Powerton Affected Units utilize various air pollution control equipment and measures, including the following: PM emissions are controlled by ESPs, SO₂ emissions are reduced by each boiler burning low-sulfur Powder River Basin coal as its primary fuel; SO₂ emissions are controlled by dry sorbent injection into the duct work at a points prior to the ESPs; NO_x emissions are controlled by OFA systems, rich reagent injection systems, and selective non-catalytic reduction systems; and mercury emissions are controlled by activated carbon injection into the flue gas prior to the ESPs. *See* Shealey Prefiled Testimony at 5.

None of the Affected Units are located in an area of Illinois that is designated as Nonattainment for any NAAQS. *See* 40 C.F.R. § 81.314 (Section 107 Attainment Status Designations; Illinois). And no area in Illinois is classified as Nonattainment for any current NAAQS for PM (*i.e.*, the 24-hour PM₁₀ standard, and the 24-hour and annual PM_{2.5} standards) (collectively, the “PM NAAQS”). *Id.*

2. Station CAAPP Permits

The Stations’ CAAPP permits specify applicable opacity standards under the Illinois regulations, and each permit provides an exception to the applicable opacity standards during SMB. Vodopivec Prefiled Testimony at 10; *see also* Shealey Prefiled Testimony at 6.

Each of the Stations’ CAAPP permits further include a CAM plan. *See* Vodopivec Prefiled Testimony, Ex. A at 81–88 (Baldwin), Ex. B at 92–97 (Kincaid), Ex. C at 79–83 (Newton); Shealey Prefiled Testimony, Ex. A at 100–104 (Powerton). According to U.S. EPA, the purpose of a CAM plan is as follows:

[CAM] is intended to provide a reasonable assurance of compliance with applicable requirements under the Clean Air Act (CAA) for large emission units that rely on pollution control device equipment to achieve compliance.

Monitoring is conducted to determine that control measures, once installed or otherwise employed, are properly operated and maintained so that they continue to achieve a level of control that complies with applicable requirements. The CAM approach establishes monitoring for the purpose of: (1) documenting continued operation of the control measures within ranges of specified indicators of performance (such as emissions, control device parameters, and process parameters) that are designed to provide a reasonable assurance of compliance with applicable requirements; (2) indicating any excursions from these ranges; and (3) responding to the data so that the cause or causes of the excursions are corrected.

U.S. EPA, Office of Air Quality Planning & Standards, *Technical Guidance Document: Compliance Assurance Monitoring, Revised Draft* (Aug. 1998), <https://www.epa.gov/sites/default/files/2016-05/documents/cam-tgd.pdf>.

Baldwin and Kincaid CAAPP Permits

As specified in Condition 5.2.2(b) of the Baldwin and Kincaid CAAPP permits, the Baldwin and Kincaid Affected Units are subject to the 30% opacity limitation set forth at “35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) or 212.124.” Vodopivec Prefiled Testimony at 10–11; Ex. A at 16; Ex. B at 13 (emphasis added). Section 212.124 is titled “Exceptions” and lays out a number of exceptions to Illinois’s opacity limitations set forth in Sections 212.122 and 212.123. 35 Ill. Admin. Code § 212.124. There are four subsections, plus subparagraphs, setting forth the exceptions to the opacity limitations. *Id.* The first of these is most pertinent to the Kincaid and Baldwin permits. Section 212.124(a) provides: “Sections 212.122 and 212.123 of this Subpart shall apply during times of startup, malfunction and breakdown except as provided in the operating permit granted in accordance with 35 Ill. Adm. Code 201.” 35 Ill. Admin. Code § 212.124(a). Meaning that Section 212.123 (the section setting forth the applicable opacity limitations) does not apply to the Baldwin or Kincaid Affected Units during times of startup, malfunction and breakdown, to the extent provided by their CAAPP permits.

The SMB authorizations/exceptions applicable to the Baldwin and Kincaid Affected Units are set forth in Conditions 7.1.3(b) and (c) of their CAAPP permits (for all permits, the “SMB Authorizations”). Vodopivec Prefiled Testimony at 11–13; Ex. A at 49–50; Ex. B at 54. Condition 7.1.3(b) contains the exception from opacity standards during startups. *Id.* (“[T]he Permittee is authorized to operate an affected boiler in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123) . . . during startup. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262 . . .”). Further, Condition 7.1.3(c) of the Baldwin and Kincaid permits contains the exception from opacity standards during malfunctions and breakdowns. *Id.* (“[T]he Permittee is authorized to continue operation of an affected boiler in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123) . . . in the event of a malfunction or breakdown of an affected boiler, including the coal crusher, the ash removal system, or the electrostatic precipitator. This authorization is provided pursuant to 35 IAC 201.149, 201.261, and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment . . .”). Finally, Conditions 7.1.3(b)(iv) and (c)(v) reference 35 Ill. Admin. Code § 201.265, stating that authorization for “excess emissions” provides a prima facie defense to enforcement actions, “provided that the Permittee has fully complied with all terms and conditions connected with such authorization.” *Id.*

Newton CAAPP Permit

As specified in Condition 5.2.2(c) of the Newton CAAPP permit, the Newton Affected Unit is subject to the 20% opacity limitation set forth at “35 IAC 212.122(a), except as allowed

by 35 IAC 212.122(b) or 212.124” *See* Vodopivec Prefiled Testimony at 13; Ex. C at 16 (emphasis added). And, as described above, Section 212.124 sets forth exceptions to both Section 212.122 and Section 212.123. *See* 35 Ill. Admin. Code § 212.124. The SMB exceptions to the Section 212.122 opacity limitations for the Newton Affected Unit are set forth in Conditions 7.1.3(b) and (c) of the Newton CAAPP permit. These conditions largely mirror the corresponding conditions in the Baldwin and Kincaid CAAPP permits for exceptions to the opacity limitations, with the differences being outlined in Cynthia Vodopivec’s testimony. *See id.* at 14.

Powerton CAAPP Permit

This classification of Illinois’s SMB provisions is also embodied in Midwest Generation’s Powerton CAAPP permit. Condition 7.1.4(a) provides that the Affected Units are subject to “the standard in Condition 5.2.2(b) [35 Ill. Admin. Code § 212.123].” *See* Shealey Prefiled Testimony at 6, Ex. C at 49. Condition 5.2.2(b) provides in relevant part: “No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent . . . pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.” *Id.*, Ex. C at 16 (emphasis added). And, as described above, Section 212.124 sets forth exceptions to both Section 212.122 and Section 212.123. *See* 35 Ill. Admin. Code § 212.124. The SMB exceptions to the Section 212.123 opacity limitations for the Powerton Affected Units are set forth in Conditions 7.1.3(b) and (c) of the Powerton CAAPP permit. These conditions largely mirror the corresponding conditions in the Dynegy CAAPP permits for exceptions to the opacity limitations; a more detailed description is provided in Sharene Shealey’s testimony. *See id.* at 6–8 ¶¶ 7–11.

B. The Joint Proposal is Narrower than the Current SMB Authorizations in the Stations' CAAPP Permits

The Joint Proposal is narrower than the current SMB authorizations in the Stations' CAAPP permits, summarized above. The Joint Proposal is narrower on its face, as the current permits state that the Companies are “authorized” to operate in excess of their Illinois SIP opacity limits during SMB, with no numeric opacity limit during such events. And in practice, the Companies have historically operated the Affected Units in reliance on these SMB authorizations.

1. The SMB Authorizations are Exceptions

U.S. EPA, environmental advocacy groups, and the Companies all agree—the current Illinois SIP SMB provisions are *exceptions* to the applicable opacity standards. And, IEPA's implementation of these provisions when issuing CAAPP permits for each Station confirms this. The permits expressly *authorize* the Companies to exceed the applicable regulatory opacity standards during SMB, with no numeric limit to the magnitude or duration of such excess opacity. The plain language of the Illinois SIP provisions (repealed from state law through the SMB Repeal) leave no doubt that the SMB authorizations in the Stations' CAAPP permits are exceptions. These authorizations fall within the scope of Section 212.124(a) (as incorporated into the Illinois SIP)—the first provision under the unambiguous title, “Exceptions.”

This is supported by (1) U.S. EPA classifying Illinois's SMB provisions as exemptions⁶, (2) Sierra Club classifying Illinois's SMB provisions as exemptions in its

⁶ In this Statement of Reasons, the Companies refer to “exemptions” from and “exceptions” to standards synonymously because exceptions and exemptions function synonymously. See *State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA's SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls to Amend Provisions Applying to Excess Emissions During*

petition challenging certain SIPs, and (3) other participants in this rulemaking classifying the SMB provisions as exemptions. In Sierra Club's petition that prompted U.S. EPA's Initial SIP Call, Sierra Club described Illinois SMB provisions as "discretionary exemptions from otherwise applicable SIP emission limitations." 78 Fed. Reg. at 12,514. U.S. EPA agreed in both its Initial and Final SIP Calls, classifying Illinois SMB provisions as "exemptions." *Id.*

This position is consistent with U.S. EPA's long-standing interpretation of the Illinois SMB provisions—specifically including the SMB exclusion from the Illinois SIP opacity standards codified at Sections 212.122 and 212.123. In U.S. EPA's final rule approving the Illinois opacity standards into the Illinois SIP, under the heading "*Section 212.124 Exceptions*," U.S. EPA opened its discussion with the following statement: "This section provides for exceptions during startup, malfunction, and breakdown, as provided in an operating permit issued in accordance with 35 IAC 201." *Approval and Promulgation of Implementation Plans; Illinois*, 57 Fed. Reg. 61,834, 61836 (Dec. 29, 1992).

Periods of Startup, Shutdown and Malfunction, 80 Fed. Reg. 33,839, 33,904 (Jun. 12, 2015) ("The general-duty provisions that apply as part of the *SSM exemption* are not alternative emission limitations; they merely define an *unlawful exemption* to an emission limitation. States have discretion to fix this issue in a number of ways, including by removing the *exceptions* entirely, by replacing these *exceptions* with alternative emission limitations including specific control technologies or work practices that do ensure continuous limits on emissions or by reformulating the entire emission limitation." (emphasis added)); *compare* 80 Fed. Reg. at 33,842 (defining "automatic exemption" as "a generally applicable provision in a SIP that would provide that if certain conditions existed during a period of excess emissions, then those exceedances would not be considered violations of the applicable emission limitations.") *with* Black's Law Dictionary, *Exception* ("An exception in a statute is a clause designed to reserve or exempt some individuals from the general class of persons or things to which the language of the act in general attaches."), <https://thelawdictionary.org/exception/#:~:text=255.An%20exception%20is%20an,Proc>.

Testimony in docket R23-18 makes clear that this is exactly how Industry has understood Illinois's SMB provisions. *See, e.g.*, Prefiled Testimony of Kelly Thompson and David R. Wall for the Illinois Environmental Regulatory Group at 9 (Feb. 6, 2023), R23-18 (“[I]t has been the regulated community’s long-standing interpretation that having such an authorization in a permit means that the facility is authorized to exceed the applicable limitation during SMB and Illinois EPA will not initiate an enforcement action for such exceedances. In essence, it has been the regulated communities’ understanding that these provisions have provided an exemption to the applicable emission standard during periods of SMB.”); Vodopivec Prefiled Testimony at 12–13; Shealey Prefiled Testimony at 6–9, ¶¶ 7–14.

The Stations’ CAAPP permits clearly state that the Companies are “authorized” to operate “in violation of” the applicable opacity standards during SMB, subject to permit-specific terms that apply in order to qualify for the exception. They further grant the Companies “permit shields,” which provide that “compliance with the conditions” of the permits “shall be deemed compliance with applicable requirements.” IEPA now takes the position in this rulemaking that Section 212.124(a) (as incorporated into the Illinois SIP), which is the first paragraph in the section titled “Exceptions,” is not actually an exception, and that permit “authorized” exceedances of the standards are, in reality, violations of law. IEPA SOR at 18 (“[T]he Agency still considers excess emissions during [SMB] to be violations, and the advance permission granted in the operating permit under Part 201 simply allows a source to assert a prima facie defense should those violations be the subject of an enforcement proceeding.”). This interpretation is incompatible with the plain language of the permits and the Illinois SIP; it is the opposite of what the permits and Illinois SIP say.

When the Stations' CAAPP permits authorize violations of the opacity standards, the word "violation" is used to mean a numeric exceedance of the applicable standard, not a violation of law. The word "violation" is commonly used in this manner in Clean Air Act parlance. *See, e.g.*, 40 C.F.R. Part 50, App. R ¶ 1(a) (using "violated" to mean that standards were exceeded or "not met": "the Pb NAAQS were violated (*i.e.*, not met)"); 80 Fed. Reg. at 33,977 (defining "*excess* emissions" to mean "emission that would be considered *violations* of the applicable emission limitation") (emphasis added). This is the only possible interpretation of "violation" in the context of these permit conditions. IEPA has clear discretion to authorize the Companies to exceed the opacity limitations during SMB events, and that is exactly what it did. It strains credulity to say that an "authorized" violation of a standard is, in fact, prohibited, *i.e.*, a violation of the law. And because Condition 8.1 of each Station's CAAPP permit states that compliance with the relevant permit conditions "shall [be] deemed compliance" (emphasis added) with underlying regulatory requirements, compliance with the SMB Authorizations cannot be considered non-compliance or a violation of law.

IEPA argues that these authorizations do nothing more than provide a prima facie defense to an enforcement action. *See* IEPA SOR at 18. Not so. The Companies agree that Section 201.265 (as incorporated into the Illinois SIP) and the CAAPP permits provide a prima facie defense to an enforcement action, in case a plaintiff alleges that an opacity exceedance constitutes a violation of law. 35 Ill. Admin. Code § 201.265 (1988) ("The granting of permission to operate during a malfunction or breakdown, or to violate the standards or limitations of Subchapter c of this Chapter during startup, and full compliance with any terms and conditions connected therewith, shall be a prima facie defense to an enforcement action alleging a violation of Section 201.149."), *incorporated into Illinois SIP*

by 57 Fed. Reg. 61,834. But the provision of a prima facie defense does not negate the authorization to exceed the standard in the first place; to the contrary, the defense relies on the authorization. The prima facie defense makes sense *only* because the Companies are *authorized* to exceed the standards. The authorization (the “granting of permission” to exceed the standards, contingent on “compliance” with related “terms and conditions”) is the express basis for the prima facie defense in Section 201.265 (as incorporated into the SIP).

The Illinois SIP confirms the obvious—when IEPA grants SMB authorizations under the Illinois SIP (and when it granted exceptions under the now-repealed SMB provisions in the Illinois regulations), as it did in the Stations’ CAAPP permits, those authorizations are “exceptions.” The Stations’ CAAPP permits state that the Affected Units are subject to either the 20% or 30% opacity limitation, “except as allowed by . . . 212.124.” Section 212.124 is titled “Exceptions” and provides a number of exceptions to the limitations set forth in Sections 212.122 and 212.123. 35 Ill. Admin. Code § 212.124. The first of these exceptions, Section 212.124(a), states: “Sections 212.122 and 212.123 of this Subpart shall apply during times of startup, malfunction and breakdown except as provided in the operating permit granted in accordance with 35 Ill. Adm. Code 201.” *Id.* § 212.124(a) (emphasis added). This means that the opacity limits in Sections 212.122 and 212.123 do not apply to the Affected Units during SMB, to the extent provided by their CAAPP permits. U.S. EPA characterized this as an “Exception” when it approved Section 212.124 into the Illinois SIP. 57 Fed. Reg. at 61836. And, as U.S. EPA acknowledges, an exception provides that a source does not have to meet a limit during specified events. *See, e.g.*, 80 Fed. Reg. at 33,977.

Simply put, the CAAPP permit SMB authorizations for opacity are exceptions to the opacity standards.

2. *The Companies have reasonably relied upon the SMB authorizations to authorize opacity in excess of opacity standards during SMB*

The Companies understand that the SMB authorizations for the Affected Units in the Stations' CAAPP Permits provide conditional exceptions to the Illinois opacity limitations under the Illinois SIP. *See* Vodopivec Prefiled Testimony at 12-13; Shealey Prefiled Testimony at ¶¶13-14. These authorizations also applied as a matter of state law prior to the SMB Repeal.

The permits authorize operation in excess of the Illinois SIP opacity limitations in Sections 212.122 and 212.123, provided that the Companies comply with the enumerated “terms and conditions” in Conditions 7.1.3(b) and (c) for startups and for malfunctions and breakdowns, respectively. They further provide, through Conditions 8.1 of each permit, that compliance with these permits conditions “shall be deemed compliance with” Sections 212.122 and 212.123, as applicable.

The Companies understand that the permits leave open the possibility that an enforcement action could be brought challenging whether the Companies complied with the terms and conditions in order to qualify for the exception, but that compliance with these terms and conditions would constitute a prima facie defense to any such enforcement action. *Id.* Simply put, the prima facie defense provided by the permits and Section 201.265 of the Illinois SIP provides a backstop to enforcement under the Illinois SIP. Because operation in violation of (*i.e.*, in excess of) the limitations in Sections 212.122 and 212.123 was expressly “authorized” by the permits, the Companies have never understood the permits as *prohibiting* such operation or opacity. *Id.* And because compliance with the relevant permit conditions “shall be deemed compliance” with the underlying regulatory requirements, the Companies

have never believed that operating in excess of opacity standards, but in compliance with the SMB authorizations, could still be considered *non-compliance*. *Id.*

C. U.S. EPA Allows SIPs to Include Alternative Emission Limits During Specified Modes of Operations

As explained further in Section III.A. below, U.S. EPA stated in its 2015 Final SIP Call that it is appropriate for states to promulgate rules that contain components applicable to different modes of operation and numerical emission limitations that have differing levels and forms for different modes of operation. *See* 80 Fed. Reg. at 33,977–79.

IV. COMPLIANCE WITH FEDERAL LAW AND GUIDANCE

A. U.S. EPA's 2022 and 2015 SIP Calls.

On January 12, 2022, USEPA published a Finding of Failure to Submit SIP Revisions. *Findings of Failure to Submit State Implementation Plan Revisions in Response to the 2015 Findings of Substantial Inadequacy and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown, and Malfunction*, 87 Fed. Reg. 1680 (Jan. 12, 2022). USEPA determined that 12 states including Illinois had failed to timely address the 2015 finding of substantial inadequacy and the SIP Call for provisions addressing excess emissions during SSM. *Id.* This finding took effect on February 11, 2022. *Id.*

In its 2015 Final SIP Call, U.S. EPA stated that it is appropriate for states to promulgate rules that contain components applicable to different modes of operation and numerical emission limitations that have differing levels and forms for different modes of operations. *See* 80 Fed. Reg. at 33,977–79. U.S. EPA recognized that there are mechanisms states can employ that do not violate the Clean Air Act to address excess emissions that may occur during certain events. Specifically, U.S. EPA provided as follows:

While automatic exemptions and director's discretion exemptions from otherwise applicable emission limitations for SSM events are not consistent

with the CAA, SIPs may include criteria and procedures for the use of enforcement discretion by air agency personnel Similarly, SIPs may, rather than exempt excess emissions, include emission limitations that subject those emissions to alternative numerical limitations or other control requirements during startup and shutdown events or other normal modes of operation, so long as those components of the emission limitations meet applicable CAA requirements and are legally and practically enforceable.

Id. at 33,978. U.S. EPA does not “interpret section 110(a)(2) or section 302(k) to require that an emission limitation in a SIP provision be composed of a single, uniformly applicable numerical emission limitation. The text of section 110(a)(2) and section 302(k) does not require states to impose emission limitations that include a static, inflexible standard.” *Id.* Instead, the Clean Air Act requires that the “SIP provision impose limits on emissions on a continuous basis, regardless of whether the emission limitation as a whole is expressed numerically or as a combination of numerical limitations, specific control technology requirements and/or work practice requirements applicable during specific modes of operation, and regardless of whether the emission limitation is static or variable.” *Id.* at 33,978–79. “For example, so long as the SIP provision meets other applicable requirements, it may impose different numerical limitations for startup and shutdown.” *Id.* at 33,979.

B. The Joint Proposal is Consistent with U.S. EPA Recommendations from the 2015 Final SIP Call

The 2015 Final SIP Call includes a short section titled, “Recommendations for Development of Alternative Emission Limitations Applicable During Startup and Shutdown.” 80 Fed. Reg. at 33980. In that section, U.S. EPA recommends that alternative requirements be narrowly tailored and take into account considerations such as the technological limitations of the specific source category and the control technology that is feasible. *Id.* U.S. EPA goes on to recommend seven specific criteria “as appropriate considerations for developing emissions limitations in SIP provisions.” *Id.* (emphasis added). But before providing any of

these seven considerations, U.S. EPA encourages states to explore approaches similar to those taken in New Source Performance Standards (“NSPS”) regulations. *Id.* U.S. EPA concludes its recommendations by admonishing that alternative emission limitations “cannot allow an inappropriately high level of emissions or an effectively unlimited or uncontrolled level of emissions.” *Id.* In fact, U.S. EPA has already proposed approval of other state regulations that “remove exemptions [to opacity limits] and replace them with [alternative limitations] that apply during transient modes of operation.” *Air Plan Approval; WA; Excess Emissions, Startup, Shutdown, and Malfunction Revisions*, 88 Fed. Reg. 39,210, 39,212 (Jun. 15, 2023).

While U.S. EPA’s recommendations are not legal requirements, the Companies carefully drafted the Joint Proposal to satisfy U.S. EPA’s recommendations. This is particularly evident when comparing the Joint Proposal to the SSM exclusion provided by relevant NSPS regulations, as U.S. EPA encourages states to do.

1. The Joint Proposal is limited to just a handful of specific sources.

First, U.S. EPA recommends considering whether the alternative limitation applies to only “specific, narrowly defined source categories using specific control strategies (*e.g.*, cogeneration facilities burning natural gas and using selective catalytic reduction).” 80 Fed. Reg. at 33,980.

The Joint Proposal is, in fact, even more narrowly tailored. The Joint Proposal applies to a total of only nine specifically enumerated coal-fired boilers located at just four power stations. By focusing on nine specific boilers, the Board (and, ultimately, U.S. EPA) can know exactly which emission units may benefit from the proposal, and how the proposal will affect each specific emission unit. This provides a clear picture of what impact the proposal will have on the operation of (and related emissions from) those units.

Consequently, U.S. EPA's first consideration weighs in favor of promulgating the Joint Proposal.

2. *It is technically infeasible to avoid all opacity exceedances during SMB.*

Second, U.S. EPA recommends considering whether control strategies are technically infeasible. *Id.* The Companies' testimony and responses to Board questions demonstrate that it is technically infeasible to ensure compliance with opacity 100% of the time during SMB.

MWG's witness, Sharene Shealey, testified that "it is infeasible for the company to comply with the opacity standards 100% of the time during periods of SMB." Shealey Prefiled Testimony at 9, ¶15. Dynegy's witness, Cynthia Vodopivec, likewise testified that the Dynegy Affected Units cannot comply with their opacity limitations 100% of the time during periods of SMB. Vodopivec Prefiled Testimony at 17. Ms. Vodopivec provided some examples explaining why:

Some of these opacity events are caused by ESP malfunctions. ESPs are large, complex systems that place an electrical charge on particles, which are then collected on oppositely charged collector plates. These systems, like all others, may experience problems even with the most vigilant operating and maintenance measures and procedures. Unexpected issues that can occur that may result in lower control efficiency and increased opacity include loss of adequate power to collector plates, inability to rap and clean the collector plates sufficiently, and broken electrodes or related equipment.

Id. at 17–18.

Ms. Vodopivec emphasized that the "risk of exceedances occurs even at the [Dynegy] Affected Units that are controlled by both ESPs and baghouses." *Id.* at 18. This risk is supported by data Dynegy submitted in response to questions it received at the February 16, 2023 hearing. Dynegy's Responses to Questions Received at Hearing ("Dynegy's Response

to Questions”) (March 1, 2023), R23-18.⁷ The third page of Exhibit A to Dynegy’s Response to Questions presents 6-minute opacity data for Baldwin boiler 2 (which is controlled by both an ESP and a baghouse) for a three-hour period on December 24, 2022. *Id.*, Ex. A at 1. Four of those six-minute periods (beginning at 10:06, 11:06, 11:24, and 11:48) recorded average opacity of 30%. *Id.* Those six-minute periods complied with the applicable 30% standard, but they came precariously close to exceeding the standard. They stand in stark contrast to typical opacity for that boiler; in 2022, the average opacity was just 3%. Dynegy’s Response to Questions at 2.

These data demonstrate that even equipping a coal-fired boiler with both an ESP *and* a baghouse is no guarantee that the boiler could comply with a 30% opacity standard (or a 20% standard) 100% of the time. But, even if adding baghouses could allow the Companies to assure compliance 100% of the time, the Board’s final action on the SMB provided no time to design, procure and install baghouses through a phase-in period. The Companies estimate that they would require approximately three years to add baghouses to those Affected Units not currently equipped with them, and that each baghouse would cost in the tens of millions of dollars. Exhibit 8, Declaration of Cynthia Vodopivec (“Vodopivec Declaration”) at ¶6; Exhibit 9, Declaration of Sharene Shealey (“Shealey Declaration”) at ¶11. And that investment of time and resources would need to be weighed against the fact that Dynegy has announced it plans to retire the Kincaid and Newton Affected Units by July 17, 2027, Vodopivec Prefiled Testimony at 6–7, and MWG currently plans to retire its Affected Units on or before December 31, 2028, Shealey Declaration at Shealey Declaration at ¶11.

⁷ Attached as Exhibit 5.

In summary, if the Companies installed baghouses, those baghouses would not be operational until late 2026, at the earliest; they would operate for less than one year at Kincaid and Newton, and roughly two years at Powerton, for a cost of tens of millions of dollars; and they would not guarantee 100% compliance during SMB after installation. Consequently, U.S. EPA's second consideration weighs in favor of promulgating the Joint Proposal.

3. *The Joint Proposal would impose work practices designed to minimize the frequency and duration of operation in SMB.*

Third, U.S. EPA recommends considering whether the “alternative emission limitation requires that the frequency and duration of operation in startup or shutdown mode are minimized to the greatest extent practicable.” 80 Fed. Reg. at 33,980.

The Joint Proposal would impose new work practice standards designed to minimize the frequency and duration of operation in SMB. Specifically, Section 212.124(d)(3)(B) of the Joint Proposal would require compliance with the following work practices as a condition of relying on the Alternative Averaging Period: “Use good engineering practices and best efforts to minimize the frequency and duration of operation in startup, malfunction and breakdown.” **Ex. A**.

As such, the third consideration weighs in favor of promulgating the Joint Proposal.

4. *IEPA has already determined that compliance with the Alternative Averaging Period would assure compliance with applicable NAAQS and State PM limitations.*

Fourth, U.S. EPA recommends considering whether, “[a]s part of its justification of the SIP revision, the state analyzes the potential worst-case emissions that could occur . . . based on the applicable alternative emission limitation.” 80 Fed. Reg. at 33,980.

If the Board promulgates the Joint Proposal and IEPA submits it to U.S. EPA for incorporation into the Illinois SIP, IEPA will be able to represent that it considered the potential worst-case emissions that could occur during SMB.

Steve Norfleet of Agora Environmental Consulting prepared a technical support document (“TSD”), attached as Exhibit 7 performing this analysis. As explained in greater detail in Section V.B., below, Mr. Norfleet concludes that the proposed AELs will assure compliance with the applicable State SIP PM standards and will not negatively impact air quality in relation to the PM NAAQS or any other NAAQS.

Mr. Norfleet’s conclusions concerning PM emissions are consistent with IEPA’s prior determinations. IEPA has already determined that compliance with the Alternative Averaging Period in the Joint Proposal would assure compliance with applicable state PM limitations—the pollutant the opacity standard is intended to address. The Alternative Averaging Period is modeled on the Affected Units’ federally enforceable CAM plans to assure continuous compliance with the applicable PM standards. Those CAM plans utilize opacity as an “indicator,” and set the indicator level at either 20% (Newton) or 30% (Baldwin, Kincaid and Powerton) over a rolling 3-hour period. The CAM plans are intended to provide a reasonable assurance of compliance with the PM standards to ensure compliance with the PM NAAQS and are incorporated in the Stations’ CAAPP permits. U.S. EPA reviewed those permits and did not object to them.

For example, the CAM plans for the Dynegy Affected Units state as follows: “The opacity indicator level has been established at a level that provides reasonable assurance that particulate matter emissions are in compliance when opacity is equal to or less than the indicator level.” Vodopivec Prefiled Testimony, Ex. A at 84, 85, 87 (Baldwin), Ex. B at 96,

97 (Kincaid), Ex. C at 83 (Newton). The Powerton CAM plan uses slightly different language to draw the same conclusion: “Opacity less than 30 percent averaged over a rolling 3-hour period is an indicator of proper ESP operation and provides reasonable assurance of meeting the 0.1 lb/mmBtu PM limit.” Shealey Prefiled Testimony, Ex. A at 104.

By using a three-hour average of data, the Board and U.S. EPA can be assured that use of the Alternative Averaging Period would ensure that the Affected Units’ opacity during SMB events does not exceed, or even put at risk of exceedance, the applicable state PM limitations. As such, it is consistent with the Illinois SIP for PM emissions.

Moreover, the Joint Proposal is more stringent than the SMB Authorizations currently applicable to the Affected Units pursuant to the Illinois SIP and the Stations’ CAAPP permits. As discussed above, those SMB Authorizations do not include any limit on the duration of opacity events or the maximum level of opacity during such events. In fact, Dynegy’s Response to Questions included actual opacity data from Newton and Kincaid that exceeded 20% or 30%, respectively, on a three-hour average basis—opacity levels that were authorized under the CAAPP permits but that would be prohibited under the Joint Proposal. Dynegy’s Responses to Questions, Ex. A at 1–2. This demonstrates that allowable opacity (and emissions) would be no higher, and may in fact be lower, under the Joint Proposal than currently allowed pursuant to the Illinois SIP under the SMB Authorizations.

Notably, these reasons also demonstrate that the Joint Proposal would not “allow an inappropriately high level of emissions or an effectively unlimited or uncontrolled level of emissions.” 80 Fed. Reg. at 33,980.

For these reasons, the fourth consideration weighs in favor of promulgating the Joint Proposal.

5. *The Joint Proposal would minimize any impact on ambient air quality.*

Fifth, U.S. EPA recommends considering whether the “alternative emission limitation requires that all possible steps are taken to minimize the impact of emissions”. 80 Fed. Reg. at 33,980. As described in the Companies’ TSD, as summarized in Section V.B., below, the Joint Proposal would have no negative impact on ambient air quality and would not interfere with any applicable requirement concerning attainment and reasonable further progress.

Consequently, the fifth consideration weighs in favor of promulgating the Joint Proposal.

6. *The Joint Proposal imposes work practices designed to minimize opacity.*

Sixth, U.S. EPA recommends considering whether the “alternative emission limitation requires that, at all times, the facility is operated in a manner consistent with good practice for minimizing emissions and the source uses best efforts regarding planning, design, and operating procedures.” 80 Fed. Reg. at 33,980.

The Joint Proposal would impose new work practice standards designed to minimize opacity, which has the effect of also minimizing the particulate emissions that result in opacity. Specifically, Section 212.124(d)(3)(A) of the Joint Proposal requires compliance with the following work practices as a condition of relying on the Alternative Averaging Period: “Operate the coal-fired boiler and related air pollution control equipment in a manner consistent with good engineering practice for minimizing opacity during such startup, malfunction or breakdown.”

As such, the sixth consideration weighs in favor of adopting the Joint Proposal.

7. *The Joint Proposal would impose detailed recordkeeping and reporting requirements.*

U.S. EPA recommends considering whether the alternative emission limitation requires that the owner's or operator's actions are documented by properly signed, contemporaneous operating logs or other relevant evidence. 80 Fed. Reg. at 33,980.

Section 212.124(d)(2) of the Joint Proposal would impose detailed recordkeeping requirements as a condition to relying on the Alternative Averaging Period *and* require that those records be reported to IEPA. The Companies based these requirements on the recordkeeping requirements that IEPA currently imposes as part of the SMB Authorizations in the CAAPP permits for these Stations.

The seventh consideration, like the other six, weighs in favor of promulgating the Joint Proposal.

8. *The Joint Proposal is more stringent than the relevant NSPS SSM exclusion*

U.S. EPA "encourages states to explore . . . approaches" to startup and shutdown events such as those taken in NSPS regulations. 80 Fed. Reg. 33,916. A fitting example is contained in the Newton CAAPP permit. In addition to being subject to the state 20% opacity limit, the Newton Affected Unit is also subject to a 20% opacity limit pursuant to NSPS, Subpart D. As summarized by Condition 7.1.4(a)(iii) of the Newton CAAPP permit, "Opacity from the affected boiler shall not exceed 20 percent, as measured on a six minute average, except for one 6 minute period per hour of not more than 27 percent pursuant to NSPS, 40 CFR 60.42(a)(2)." Vodopivec Prefiled Testimony, Ex. C at 49.

The permit goes on to provide an SSM exception to the 20% NSPS limitation, pursuant to 40 C.F.R. §§ 60.8(c) and 60.11(c), stating that the "limitations do not apply during startup, shutdown, and malfunctions, as defined by 40 CFR 60.2," though such exceedances "are still

subject to recordkeeping and reporting requirements under the NSPS.” Vodopivec Prefiled Testimony, Ex. C at 49 (Condition 7.1.4(a)(iv)). This SSM exception is broader (and less stringent) than the Joint Proposal because it applies to *all* shutdowns, irrespective of whether the excess opacity occurs during periods of malfunction or breakdown. And the NSPS SSM exception imposes no opacity limit. Because the Joint Proposal is *narrower* and more stringent than the NSPS startup, shutdown, and malfunction exception, it should be approved.

C. The Joint Proposal Compliments IEPA’s SMB Rule and does not Jeopardize Approvability

The Joint Proposal does not require or suggest altering any of the revisions that the Board adopted in R23-18. The Companies drafted the Joint Proposal to fit squarely within the framework contemplated by the Board’s recent revisions to Section 201.149:

No person shall cause or allow the continued operation of an emission source during malfunction or breakdown of the emission source or related air pollution control equipment if such operation would cause a violation of the applicable standards or limitations set forth in Subchapter c of this Chapter except as specifically provided for by such standard or limitation. ~~unless the current operating permit granted by the Agency provides for operation during a malfunction or breakdown.~~ No person shall cause or allow violation of the applicable standards or limitations set forth in that Subchapter during startup except as specifically provided for by such standard or limitation. ~~unless the current operating permit granted by the Agency provides for violation of such standards or limitations during startup.~~

The underscored text added to Section 201.149 in the main docket, expressly contemplates that individual standards and limitations in Subchapter C (including the Part 212 opacity standards) may specifically provide for exceptions for emissions or opacity during SMB events. That is precisely what the Joint Proposal would do.

V. ENVIRONMENTAL IMPACT OF PROPOSED RULE
(Section 102.202(b))

The Joint Proposal relates to only opacity. Opacity is not a pollutant; it can be an indicator for PM. The Joint Proposal will not grant permission for the Companies to exceed

any limitations or standards for PM or any other pollutant, and it will not affect the State's attainment or reasonable further progress in connection with any NAAQS, or the State's compliance with any other federal Clean Air Act requirements.

A. The Joint Proposal Would Not Allow the Companies to Exceed Any Limit on Emissions of any Pollutant

Opacity is not a pollutant. Rather, opacity is a measure of how much light is blocked by a plant's emissions, and it may be used as an indicator or surrogate for PM. *See, e.g., Sierra Club v. Tennessee Valley Auth.*, 592 F. Supp. 2d 1357, 1362 (N.D. Ala. 2009) ("TVA") ("Opacity is not a pollutant, but instead is a measure of the light-blocking property of a plant's emissions. . . . Opacity serves as a surrogate for determining continuous compliance with particulate matter standards.")

The Court's explanation in *TVA* is consistent with how opacity has been regulated in Illinois. As defined by the Board's regulations, opacity is simply "that fraction of light, expressed in percent, which when transmitted from a source through a smoke-obscured path, is prevented from reaching the observer or instrument receiver." Section 211.4130. The Board has explained that the State's opacity standards serve as imperfect surrogates for the State's PM standards. *See* Order of the Board, Proposed Rule, Second Second Notice at 1-2 (Dec. 20, 1985). The Board has also explained that opacity can provide a "qualitative indicator of operating situations which should be investigated." *Id.*

Opacity is used as an "indicator" for assuring compliance with applicable Illinois SIP PM standards in CAM plans for the Affected Units, which are incorporated into the Stations' CAAPP permits. The use of opacity as an "indicator" in the CAM plans is discussed throughout this SOR and further explained in the TSD.

The Joint Proposal would establish AELs for opacity during SMB events. But it would not establish AELs for PM or any other pollutant. To be clear, the Joint Proposal would not excuse (through an exclusion, alternative emission limit, or a defense) any exceedance of any applicable emission standard or limitation for any pollutant.

B. The TSD Demonstrates that the Joint Proposal Would Not Interfere with NAAQS or Other Clean Air Act Requirements that Must be Addressed Pursuant to Section 110(l) of the Clean Air Act

Pursuant to Section 110(l) of the Clean Air Act, U.S. EPA may not approve a SIP revision that “would interfere with any applicable requirement concerning attainment and reasonable further progress (as defined in section 7501 of this title), or any other applicable requirement of this chapter.” 42 U.S.C. § 7410(l). The Companies asked Mr. Norfleet to prepare a TSD to address what impact, if any, the Joint Proposal would have on “attainment and reasonable further progress” or on any other applicable Clean Air Act requirements. In the attached TSD, Mr. Norfleet concludes that the Joint Proposal will not interfere with attainment, reasonable further progress, or any other Clean Air Act requirements. Exhibit 7 at 12-13. Mr. Norfleet reached that conclusion based, in part, on a comparison of allowable emissions under the State’s current regulations following the repeal of the SMB provisions, on the one hand, and allowable emissions under the the Joint Proposal, on the other hand. *Id.*

The TSD first provides correlations of PM and opacity data. *Id.* at 7-9. Based on these correlations, the TSD concludes that the proposed AELs are more stringent than the applicable Illinois SIP PM standards. *Id.* at 9-10. Specifically, when operating at the AELs (20% or 30% opacity on a three-hour average), the TSD estimates that correlated PM emissions would be lower than 80% of the applicable Illinois SIP PM standard for the Powerton Affected Units, lower than 50% of the applicable standard for the Newton and Kincaid Affected Units, and lower than 25% of the applicable standards for the Baldwin

Affected Units. *Id.* at 10. These conclusions are consistent with the CAM plans for the Affected Units, which conclude that operation with 20% or 30% opacity, as applicable, on a three-hour average provides a reasonable assurance of compliance with the applicable Illinois SIP PM standards. Those CAM plan conclusions are discussed in greater detail above in this SOR, including in Section III.B.4.

A key feature of the analysis in the TSD and in the Affected Units' CAM plans is the use of a three-hour average for Opacity. Like the CAM plans, the TSD utilizes a three-hour average as the best indication of compliance with the hourly limits. IEPA has explained the reasoning for using three-hour opacity averages to demonstrate compliance with one-hour PM standards as follows: "35 IAC 212.110 provides that compliance with the applicable PM standard is based on emissions testing. Since emissions testing for PM includes at least three test runs, each nominally one-hour in duration, this indicates that a three-hour averaging period is an appropriate averaging time for purposes of CAM." *July 14, 2016 Statement of Basis for the Planned Issuance of a Revised Clean Air Act Permit Program (CAAPP) Permit Through Reopening and Significant Modification and a Revised Acid Rain Program Permit for Illinois Power Generating Company Newton Power Station*. Short term changes in opacity make no difference to the corresponding anticipated maximum PM emission rate (and associate PM mass emissions) under Mr. Norfleet's correlations or under the correlations that IEPA relied upon in approving these CAM plans, so long as the three-hour opacity average remains at or below 20% or 30%, as applicable. Exhibit 7 at 12.

All areas of Illinois are designated as either attainment or unclassifiable with the 24-hour or annual PM NAAQS. The TSD concludes that, because "there is no impact on allowable PM on a one-hour basis" as determined through the correlations, "let alone on a 24-

hour or annual basis, the proposed AELs will have no impact on the State's continued ability to remain in attainment" with the 24-hour and annual PM NAAQS. *Id.* at 12-13.

Similarly, the proposed AELs will not result in any increased emission of any other criteria pollutant. The TSD explains that there is no correlation between opacity and any gaseous pollutant. *Id.* Consequently, the AELs cannot affect any NAAQS for any gaseous criteria pollutant. *Id.* The only non-gaseous criteria pollutant other than PM is lead. The lead NAAQS is based on three-month averages of data. *Id.* at 13. The AELs would not affect the proportion of lead to total PM. *Id.* Consequently, because the AELs will not result in the increase in PM emissions, they will not result in any increase in lead emissions and will not affect the three-month average lead NAAQS. In summary, the AELs will not affect the emissions of any pollutant, will not negatively impact air quality in relation to any NAAQS, and will not negatively affect compliance with any other Clean Air Act requirement. *Id.* at 14.

C. Any Increase in Allowed Variability in Opacity Within 3-Hour Averaging Periods Would Not Affect Human Health or the Environment

The Joint Proposal would allow for greater short-term variability in opacity; however, any increase above the applicable standard on a six-minute average basis would be allowed only if offset by lower average opacity in the 174 minutes leading up to that exceedance. Such transient increases in allowable short-term opacity, when offset by corresponding decreases in allowable opacity that are inherent in the three-hour averaging structure of the the Joint Proposal, do not affect human health or the environment.

The proposed AELs would have no impact on any NAAQS. The Board has ruled that NAAQS are the appropriate standards to evaluate potential health and environmental risks associated with increases in emissions of pollutants for which U.S. EPA has established

NAAQS. *In the matter of: Amendments to 35 Ill. Adm. Code 255.233, Multi-Pollutant Standard (MPS)*, R18-20, Second First Notice (Oct. 4, 2018). Opacity is not a pollutant, and there is no NAAQS for opacity. But opacity can be an indicator for PM. As explained in Section V.B, above, the Joint Proposal will not result in any negative impact on air quality in relation to the PM NAAQS or any other NAAQS.

Moreover, the Joint Proposal will not affect the State's compliance with the federal Regional Haze Program. Illinois meets federal regional haze program requirements. Illinois's 2018 progress report included a determination that the Illinois existing regional haze SIP required no substantive revision to achieve the established regional haze visibility improvement and emissions reduction goals. *Air Plan Approval; Illinois; Regional Haze Progress Report*, 83 Fed. Reg. 15,744 (Apr. 12, 2018). In addition, the Kincaid CAAPP permit (including its SMB authorizations) was incorporated into the Illinois's regional haze SIP. *Approval and Promulgation of Air Quality Implementation Plans; Illinois; Regional Haze*, 77 Fed. Reg. 39,943 (Jul. 6, 2012). Illinois's progress report confirmed that the Kincaid CAAPP permit and the emission limits and operating conditions it contains meet the Regional Haze Rule requirements of the CAA, and are federally enforceable. 83 Fed. Reg. at 15,745. Because the Joint Proposal is more stringent than the SMB authorizations in the Kincaid CAAPP permit, and the Joint Proposal will not result in an increase in actual or allowable PM emissions, it will not impact the State's compliance with the Regional Haze Program.

VI. ECONOMIC IMPACT
(Section 102.202(b))

The Companies and the Affected Units are important contributors to the Illinois economy and the Affected Units are vital components of the Illinois and broader regional electrical grid. *See, e.g., Vodopovic Prefiled Testimony at 2-3.* As explained above in Section

IV.B.2., it is not feasible for the Companies to comply with opacity limits 100% of the time during SMB conditions.

The Companies can and do take steps in response to discrete issues that arise and result in opacity exceedances. Vodopivec Declaration at ¶¶3-4; Shealey Declaration at ¶¶3-9. They cannot, however, take any additional steps to avoid or minimize opacity, in general, short of installing baghouses on the Affected units not already utilizing that technology. Vodopivec Declaration at ¶¶3-5; Shealey Declaration at ¶¶3-10. But the addition of baghouses would not eliminate the need for the requested regulatory relief. Vodopivec Declaration at ¶7; Shealey Declaration at ¶10. The Companies estimate that they would require approximately three years to add baghouses to those Affected Units not currently equipped with them, and that each baghouse would cost in the tens of millions of dollars. Vodopovic Declaration at ¶6; Shealey Declaration at ¶11. The baghouses would offer no benefit prior to their installation (late 2026, at the earliest). And, as explained in Section IV.B.2 above, even coal-fired boilers equipped with both an ESP and a baghouse cannot guarantee compliance with the opacity standards in Section 212.122(a) and 212.123(a) 100% of the time. That investment of time and resources would need also to be weighed against the fact that Dynegy has announced it plans to retire the Kincaid and Newton Affected Units by July 17, 2027, Vodopivec Prefiled Testimony at 6–7, and MWG plans to retire its Affected Units on or before December 31, 2028, Shealey Declaration at ¶11.

In summary, if the Companies installed baghouses, those baghouses would not be operational (and would provide no benefit) until late 2026, at the earliest; they would operate for less than one year at Kincaid and Newton, and roughly two years at Powerton, for a cost of tens of millions of dollars; and they would not guarantee 100% compliance during SMB after installation.

Absent the requested relief, the Companies may be faced with the need to immediately shut down Affected Units in response to opacity exceedances during SMB that cannot be immediately resolved through other means, forcing them to cycle back on through a new startup. And they would face the risk enforcement actions alleging violations of the law for unavoidable opacity exceedances. Exhibit G at 13-14. These realities could also factor into the Companies' decisions concerning the economic viability of the Affected Units between now and their currently anticipated retirement dates. Vodopedic Declaration at ¶6; Shealey Declaration at ¶11.

Critically, the Board has never considered the economic impact of enforcing opacity standards *without* exceptions for SMB conditions. In repealing the SMB provisions, the Board relied on IEPA's assertion that "the Board would have addressed the economic reasonableness of the underlying standards when it adopted them." Final Opinion and Order at 6 (July 20, 2023), R23-18. However, the majority of the "underlying standards" were adopted in April 1972 with the explicit understanding that exemptions for SMB conditions were necessary for the reasonable enforcement of the standards. *See* Opinion and Order of the Board (Apr. 13, 1972), *In the Matter of: Emission Standards*, R1971-023 (adopting Sections 201.261–201.265 (then Rules 105(b)–(f)) and Section 212.124 (then Rule 202(c)). In adopting the SMB provisions, the Board explained the following:

No machine works perfectly all the time. Further, startup conditions may result in less than optimum emission control. The policy of this Rule is that insofar as is practicable, efforts shall be made to reduce the incidence and duration of startups and excessive emissions during startup periods; and that, except in special cases, equipment whose pollution controls are out of order should not be operated, just as an automobile should not be operated when its brakes are out of commission. Clearly the latter principle cannot be absolute, for it may not be worth blacking out the entire Midwest to prevent emissions from a partly malfunctioning boiler precipitator. We cannot resolve the myriad of individual variations in a single rule. The Agency's . . . proposal . . . places

case-by-case discretion in the Agency under its permit powers, providing that if special conditions warrant permission to operate during a malfunction, or if irreducible startup emissions will somewhat exceed the general standards, [I]EPA may grant permission for such emissions upon application and proof.”

Opinion and Order of the Board at 9 (Apr. 13, 1972), R1971-023. The Board recognized that sources may be unable to comply with applicable emission limitations or standards during startup because “startup conditions may result in less than optimum emission control.” *Id.* The Board further recognized that unavoidable malfunctions and breakdowns do occur and that, in certain circumstances, continued operation is required even though emissions may be in excess of the generally applicable standard. *Id.* As a result, the Board promulgated the SMB provisions, giving IEPA the power to “grant permission” for such excess emissions or opacity. *Id.* To date, the Board has not meaningfully reconsidered these findings.⁸

VII. SYNOPSIS OF TESTIMONY

(Section 102.202(c))

The Companies presented testimony in writing and orally at the second hearing in R23-18. Portions of testimony from each Company’s witness (Cynthia Vodopivec for Dynegy, and Sharene Shealey for MWG) are referenced throughout this Statement of Reasons in support of the Joint Proposal. Each Company’s complete written testimony from R23-18, including pre-filed testimony and written responses to questions, is attached as Exhibits to

⁸ The Board has reconsidered some of the underlying standards in subsequent years. However, when it did so it found the standards were economically reasonable because most sources had maintained compliance with the 1972 standards. *See* Opinion and Order of the Board (June 30, 1988), *In the Matter of Particulate Emission Limitations, Rule 203(g)(1) and (202)(b) of Chapter 2*, R1982-001(B) (finding that it was economically reasonable to re-adopt invalidated standards because of “widespread compliance” with the invalid rule). However, such compliance would have still included the availability of SMB authorizations in source permits.

this Statement of Reasons. The Companies also incorporate by reference their witnesses' testimony from the second hearing. The Companies do not anticipate proffering additional testimony, unless the Board schedules a hearing. As noted in Section X, below, the Companies believe no such hearing is required.

VIII. MATERIALS INCORPORATED BY REFERENCE
(Sections 102.202(d))

No materials will be incorporated by reference in the Joint Proposal.

IX. WRITTEN STATEMENT THAT THE PROPOSAL AMENDS THE MOST RECENT VERSION OF THE RULE AS PUBLISHED ON THE BOARD'S WEB SITE OR AS OBTAINED FROM THE CLERK.
(Section 102.202(i))

The Companies certify that the Joint Proposal would amend the most recent version of 35 Ill. Admin. Code § 212.214 as published on the Board's website.

X. NO ADDITIONAL HEARING IS REQUIRED

In the Board's July 6, 2023 order, the Board sought comment on whether the Act requires one or more hearings to be held in this sub-docket on any proposal filed, including whether any hearing already held in the main docket would satisfy all or part of that requirement. The Companies contend no additional hearing is required for this Joint Proposal. The Joint Proposal was proposed and thoroughly vetted in the main docket through comments, written answers to questions, written testimony, and oral testimony at the Second Hearing.

The Act does not require a public hearing because the Joint Proposal was presented at the hearing held on February 16, 2023 (the "Second Hearing") as a revision to the IEPA's proposed regulations in Docket R23-18. The board has the authority to revise proposed regulations "in response to suggestions made at the hearing, **without conducting a further hearing on the revisions.**" 415 Ill. Comp. Stat. 5/28(a) (emphasis added). Accordingly, the

Act does not require the Board to hold any hearing before adopting the Joint Proposal.

Even if the Board finds that a hearing is required under the Act, the Second Hearing satisfied the requirements of Section 5/28(a), and no additional hearing is required in this sub-docket. In accordance with 35 Ill. Admin. Code § 102.416 and CAA Section 110(l), 42 U.S.C. 7410(l), notice of the Second Hearing was published in newspapers of general circulation throughout Illinois in December 2022, well more than thirty days prior to the hearing. *See, e.g.,* Certificate of Publication, Chicago Sun Times (Dec. 22, 2022), R23-18. The Companies submitted proposals substantively identical to the Joint Proposal in pre-filed testimony that was made publicly available on the Board website prior to the Second Hearing. The Companies' pre-filed testimony was served on the People of the State of Illinois (through the Attorney General) as well as multiple non-governmental organizations including the Environmental Law and Policy Center and Citizens Against Ruining the Environment. At the Second Hearing, witnesses for the Companies answered extensive questions from the People of the State of Illinois and the Board regarding their proposals. *See* Transcript of February 16, 2023 Hearing (Feb. 21, 2023), R23-18. IEPA representatives were also present at the Second Hearing and given full opportunity to cross-examine the Companies' witnesses, but declined to do so. *Id.*

The Second Hearing was held before a qualified hearing officer, attended by multiple members of the Board, open to the public, subject to public comment, and testimony was recorded and transcribed. Accordingly, the Second Hearing satisfied notice and hearing requirements of Section 5/28(a) (and by extension, the federal notice requirements under 40 C.F.R. § 51.102). The public had ample opportunity to review, comment on, and object to the Companies proposals (and, through the Attorney General, took full advantage of that

opportunity) and no further public hearings are required.

If other parties submit proposals for alternative emission limitations or other regulatory relief in this sub-docket that were not submitted in the main docket, the Companies urge the Board to open a separate sub-docket to consider their Joint Proposal. The Companies took swift action and expended significant resources to diligently seek and support AELs in the main fast-track docket and would be prejudiced if they were now required to wait months for other parties to reach the same procedural milestones that the Companies already satisfied.

XI. ENVIRONMENTAL JUSTICE

IEPA's Environmental Justice ("EJ") policy sets a goal for the Agency to ensure that communities are not disproportionately impacted by degradation of the environment or receive a less than equitable share of environmental protection and benefits. The requested relief is consistent with that goal.

None of the Affected Units is located in an area currently designated as an EJ area. Based on IEPA's EJ Start Tool, the distance of nearest boundary of an EJ area to each Station's stacks is as follows: over eight miles from Bladwin, over 12 miles from Kincaid, over 15 miles from Newton, and more than one but less than two miles from Powerton.

Most importantly, though, as demonstrated in the Companies' TSD, the Joint Proposal will not result in any impacts to human health or the environment anywhere, and so will not have any disproportionate impacts or create any EJ concerns for Illinois EJ communities.

XII. CONCLUSION

Principles of fairness require that sources not be subject to standards that are impossible to meet. It is not possible for the Affected Units to comply with the State's opacity regulations 100% of the time during periods of SMB. The Joint Proposal would subject the Affected Units to new, narrowly tailored standards during periods of SMB when they

otherwise could not comply. The Joint Proposal includes numeric opacity limits and work practices designed to minimize the frequency, duration and level of opacity during periods of SMB, and so it is more stringent than the existing Illinois SIP and the SMB provisions in the Stations' CAAPP permits. The Joint Proposal would not result in any greater opacity—or greater emissions of any pollutant. The Joint Proposal would not authorize any increase in opacity or emissions above those levels currently authorized under the Illinois SIP and the Stations' CAAPP permits. As such, it will not result in backsliding. The Companies drafted the Joint Proposal to satisfy all of U.S. EPA's recommendations in its Final SIP Call for such provisions and have included a TSD to support the State's CAA Section 110(l) demonstration. For these reasons, the Companies believe the Joint Proposal ultimately could and should be approved into the Illinois SIP.

The Companies respectfully request that the Board adopt the Companies' Joint Proposal, so that they can continue operating the Affected Units in compliance with state opacity requirements during SMB as they generate reliable power.

Dated: August 7, 2023

Respectfully submitted,

Dynegy Midwest Generation, LLC; Illinois
Power Generating Company; and Kincaid
Generation, LLC

Midwest Generation, LLC

/s/ Samuel A. Rasche
One of their Attorneys

Joshua R. More
Amy Antonioli
Samuel A Rasche
ARENTFOX SCHIFF LLP

Andrew N. Sawula
ARENTFOX SCHIFF LLP

233 South Wacker Drive, Suite 7100
Chicago, Illinois 60606
(312) 258-5500

Joshua.More@afslaw.com

Amy.Antoniolli@afslaw.com

Sam.Rasche@afslaw.com

One Westminster Place, Suite 200
Lake Forest, Illinois 60045
(847) 295-4336

Andrew.Sawula@afslaw.com

Attorneys for Dynegy and Midwest Generation Attorney for Dynegy and Midwest Generation

EXHIBITS

- 1. Joint Proposal**
- 2. Joint Comment**
- 3. Vodopivec Prefiled Testimony**
- 4. Shealey Prefiled Testimony**
- 5. Dynegy's Written Responses to Questions Received at Hearing**
- 6. MWG's Written Responses to Questions Received at Hearing**
- 7. Technical Support Document**
- 8. Declaration of Cynthia Vodopevic**
- 9. Declaration of Sharene Shealey**

CERTIFICATE OF SERVICE

I, the undersigned, certify that on this 7th day of August, 2023:

I have electronically served true and correct copies of the Statement of Reasons of Dynegy and Midwest Generation by electronically filing with the Clerk of the Illinois Pollution Control Board and by e-mail upon each person listed in the attached service list.

My e-mail address is sam.rasche@afslaw.com.

The number of pages in the e-mail transmission is 1,003.

The e-mail transmission took place before 5:00 p.m.

/s/ Samuel A. Rasche

Samuel A. Rasche

Dated: August 7, 2023

Joshua R. More
Amy Antonioli
Samuel A. Rasche
ARENTFOX SCHIFF LLP
233 South Wacker Drive, Suite 7100
Chicago, Illinois 60606
(312) 258-5500
Joshua.More@afslaw.com
Amy.Antonioli@afslaw.com
Sam.Rasche@afslaw.com

Andrew N. Sawula
ARENTFOX SCHIFF LLP
One Westminster Place, Suite 200
Lake Forest, Illinois 60045
(847) 295-4336
Andrew.Sawula@afslaw.com

SERVICE LIST	
Illinois Pollution Control Board Don Brown don.brown@illinois.gov 100 W. Randolph St. Suite 11-500 Chicago, IL 60601	Illinois Environmental Protection Agency Charles E. Matoesian charles.matoesian@illinois.gov Dana Vetterhoffer dana.vetterhoffer@illinois.gov 1021 North Grand Avenue East P.O. Box 19276 Springfield, IL 62794
Office of the Attorney General Molly Kordas molly.kordas@ilag.gov Ann Marie A. Hanohano annmarie.hanohano@ilag.gov 69 West Washington Street, Suite 1800 Chicago, IL 60602 Jason E. James Jason.James@ilag.gov 201 West Point Drive, Suite 7 Belleville, IL 62226	Illinois Department of Natural Resources Renee Snow - General Counsel renee.snow@illinois.gov One Natural Resources Way Springfield, IL 62702
IERG Kelly Thompson kthompson@ierg.org 215 E. Adams St. Springfield, IL 62701	HeplerBroom LLC Melissa S. Brown Melissa.brown@heplerbroom.com Alec Messina Alex.Messina@heplerbroom.com 4340 Acer Grove Drive Springfield, IL 62711
Faith E. Bugel fbugel@gmail.com 1004 Mohawk Rd. Wilmette, IL 60091	Environmental Law and Policy Center Cantrell Jones CJones@elpc.org 35 E. Wacker Drive, Suite 1600 Chicago, IL 60601
Greater Chicago Legal Clinic, Inc. Keith I. Harley kharley@kentlaw.edu 211 West Wacker Drive, Suite 750 Chicago, IL 60606	McDermott, Will & Emery Mark A. Bilut mbilut@mwe.com 227 West Monroe Street Chicago, IL 60606-5096
U.S. EPA – Region 5	

Michael Leslie leslie.michael@epa.gov Ralph H. Metcalfe Federal Building 77 West Jackson Blvd. Chicago, IL 60604	
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EXHIBIT 1

Joint Proposal

Section 212.124 Exceptions

d) During times of startup of coal-fired boiler 1 or 2 at the Baldwin Energy Complex, coal-fired boiler 1 or 2 at the Kincaid Power Station, coal-fired boiler 1 at the Newton Power Station, or coal-fired boiler 51, 52, 61, or 62 at the Powerton Generating Station, or of malfunction or breakdown of these boilers or the air pollution control equipment serving these boilers, when average opacity exceeds 20 or 30 percent for a six-minute period, as applicable pursuant to Section 212.122(a) or 212.123(a) of this Subpart, compliance with Section 212.122(a) or 212.123(a) may alternatively be demonstrated for that six-minute period as follows.

1) Alternative Averaging Period.

Compliance for that six-minute period may be determined based on a three-hour average of opacity, utilizing opacity readings for those six minutes and the immediately preceding 174 minutes.

2) Recordkeeping and Reporting

A) Any person relying on the Alternative Averaging Period in Section 212.124(d)(1) of this Subpart shall maintain records of such average opacity calculations and shall report such calculations to Illinois EPA as part of the next quarterly excess emissions report for the source.

B) For periods of startup, such report shall include:

1) The date, time, and duration of the startup.

2) A description of the startup.

3) The reason(s) for the startup.

4) An indication of whether or not written startup procedures were followed. If any written startup procedures were not followed, the report shall include any departures from established procedures and any reason the procedures could not be followed.

5) A description of any actions taken to minimize the magnitude or duration of opacity that requires utilization of the Alternative Averaging Period in Section 212.124(d)(1) of this Subpart.

6) An explanation whether similar incidents could be prevented in the future and, if so, a description of the actions taken or to be taken to prevent similar incidents in the future.

- 7) Confirmation of fulfillment of the requirements of Section 212.124(d)(3) of this Subpart.
- C) For periods of malfunction and breakdown, such report shall include:
 - 1) The date, time, duration (i.e., the length of time during which operation continued with opacity in excess of 20 or 30 percent, as applicable, on a six-minute average basis) until corrective actions were taken or the boiler was taken out of service.
 - 2) A description of the incident.
 - 3) Any corrective actions used to reduce the magnitude or duration of opacity that requires utilization of the Alternative Averaging Period in Section 212.124(d)(1) of this Subpart.
 - 4) Confirmation of fulfillment of the requirements of Sections 212.124(d)(2)(D) and (d)(3) of this Subpart.
- D) Any person who causes or allows the continued operation of a coal-fired boiler during a malfunction or breakdown of the coal-fired boiler or related air pollution control equipment when such continued operation would require reliance on the Alternative Averaging Period in Section 212.124(d)(1) of this Subpart to demonstrate compliance with Section 212.122 or 212.123 of this Subpart, as applicable, shall immediately report such incident to the Agency by telephone, facsimile, electronic mail, or such other method as constitutes the fastest available alternative, except if otherwise provided in the operating permit. Thereafter, any such person shall comply with all reasonable directives of the Agency with respect to the incident.

3) Work Practices

Any person relying on the Alternative Averaging Period in Section 212.124(d)(1) of this Subpart must comply with the following Work Practices.

- A) Operate the coal-fired boiler and related air pollution control equipment in a manner consistent with good engineering practice for minimizing opacity during such startup, malfunction or breakdown.
- B) Use good engineering practices and best efforts to minimize the frequency and duration of operation in startup, malfunction and breakdown.

EXHIBIT 2

Joint Comment

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:

AMENDMENTS TO 35 ILL. ADM.
CODE PARTS 201, 202, AND 212

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R2023-018
(Rulemaking – Air)

**JOINT POST-HEARING COMMENT
OF DYNEGY AND MIDWEST GENERATION**

Dynegy Midwest Generation, LLC; Illinois Power Generating Company; and Kincaid Generation, LLC (collectively, “Dynegy”) and Midwest Generation, LLC (“MWG”) (collectively, the “Companies”) by their attorneys, ArentFox Schiff LLP, and pursuant to 35 Ill. Admin. Code § 102.108 and the Hearing Officer’s February 21, 2023 Order, are pleased to submit this Joint Post-Hearing Comment.

The Companies oppose promulgation of the Illinois Environmental Protection Agency’s (“IEPA”) proposed rule revisions in this proceeding (the “Proposed Rule”). The Companies can support the Proposed Rule, however, if the Illinois Pollution Control Board (the “Board”) includes limited relief from the opacity standards for their coal-fired boilers as proposed in their prefiled testimony. The Companies propose a narrowly tailored addition to the Proposed Rule in order to establish an alternative averaging period to demonstrate compliance with the applicable opacity standards for each Company’s remaining operating coal-fired boilers in Illinois during periods of startup, malfunction, and breakdown (“SMB”). The Companies appreciate the Board’s consideration of their proposal.

PROCEDURAL STANDARDS

IEPA filed the Proposed Rule with the Board under Illinois's fast-track rulemaking process for "rules proposed by IEPA and required to be adopted by the State under the Clean Air Act." 415 Ill. Comp. Stat. 5/28.5. The Board is authorized to revise IEPA's proposed rules after the comment period concludes, based on the record of the proceeding. *Id.* at 5/28.5(l). The Board "must consider the economic impact of the rule based on the record," *id.* at 5/28.5(g), and, as with all regulatory proceedings, must consider "the technical feasibility and economic reasonableness of ... reducing" the pollution at issue, *id.* at 5/27(a).

BACKGROUND

On December 7, 2022, IEPA filed the Proposed Rule amending Parts 201, 202, and 212 of Title 35 (Environmental Protection) of Illinois's Administrative Code. Rulemaking Proposal Entitled "Amendments to 35 Ill. Adm. Code Parts 201, 202, and 212" (Dec. 7, 2022), *In the Matter of: Amendments to 35 Ill. Adm. Code Parts 201, 202, and 212*, R2023-018 (hereinafter "Statement of Reasons"). As part of its Proposed Rule, IEPA is proposing to remove certain provisions from Parts 201 and 212 that, in some circumstances, allow sources to exceed emissions standards in Illinois during SMB events. Statement of Reasons at 30; *see, e.g.*, 35 Ill. Admin. Code §§ 201.261, 201.262, 201.263, 201.264, 201.265, 212.124(a). IEPA is proposing to remove these provisions based on recent United States Environmental Protection Agency ("U.S. EPA") decisions and statements related to State Implementation Plans ("SIPs") that include exemptions, discretionary exceptions, or affirmative defenses related to exceedances that occur during SMB. *See generally* Statement of Reasons.

Original Implementation of Illinois's SMB Provisions

The majority of the SMB provisions addressed in IEPA's proposal were originally adopted by the Board in April 1972. *See* Opinion and Order of the Board (Apr. 13, 1972), *In the Matter of: Emission Standards*, R1971-023 (adopting Sections 201.261–201.265 (then Rules 105(b)–(f)) and Section 212.124 (then Rule 202(c)). In adopting the SMB provisions, the Board explained the following:

No machine works perfectly all the time. Further, startup conditions may result in less than optimum emission control. The policy of this Rule is that insofar as is practicable, efforts shall be made to reduce the incidence and duration of startups and excessive emissions during startup periods; and that, except in special cases, equipment whose pollution controls are out of order should not be operated, just as an automobile should not be operated when its brakes are out of commission. Clearly the latter principle cannot be absolute, for it may not be worth blacking out the entire Midwest to prevent emissions from a partly malfunctioning boiler precipitator. We cannot resolve the myriad of individual variations in a single rule.

Opinion and Order of the Board at 9 (Apr. 13, 1972), R1971-023. The Board recognized that sources may be unable to comply with applicable emission limitations or standards during startup because “startup conditions may result in less than optimum emission control.” *Id.* The Board further recognized that unavoidable malfunctions and breakdowns do occur and that, in certain circumstances, continued operation is required even though emissions may be in excess of the generally applicable standard. *Id.*

U.S. EPA's SIP Calls

Based on this history and the plain language of the provisions, U.S. EPA and other entities have historically characterized Illinois's regulation of SMB events as exemptions. In 2011, Sierra Club filed a petition for rulemaking with U.S. EPA that included requests concerning the treatment of source excess emissions in state rules during periods of startup, shutdown, or malfunction. In

that petition, Sierra Club stated that Illinois's SMB provisions were "discretionary exemptions"¹ from otherwise applicable SIP emission limitations." *State Implementation Plans: Response to Petition for Rulemaking; Findings of Substantial Inadequacy; and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown, and Malfunction* 78 Fed. Reg. 12,460, 12,514 (Feb. 22, 2013). U.S. EPA agreed, classifying Illinois's SMB provisions as "exemptions." *Id.* ("The EPA agrees that together Ill. Admin. Code tit. 35 § 201.261, Ill. Admin. Code tit. 35 § 201.262, and Ill. Admin. Code tit. 35 § 201.265 can be read to create exemptions by authorizing a state official to determine in the permitting process that the excess emissions during startup and malfunction will not be considered violations of the applicable emission limitations."); *id.* at 12,515 ("The EPA believes that these provisions allow for exemptions from the otherwise applicable emission limitations, . . ."). In its Final SIP Call in 2015, U.S. EPA reiterated that Illinois's SMB provisions functioned as exemptions from emission standards. *State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA's SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction,*

¹ In this Post-Hearing Comment, the Companies refer to "exemptions" from and "exceptions" to opacity and emissions standards synonymously because exceptions and exemptions function synonymously. See 80 Fed. Reg. 33,904 ("The general-duty provisions that apply as part of the *SSM exemption* are not alternative emission limitations; they merely define an *unlawful exemption* to an emission limitation. States have discretion to fix this issue in a number of ways, including by removing the *exceptions* entirely, by replacing these *exceptions* with alternative emission limitations including specific control technologies or work practices that do ensure continuous limits on emissions or by reformulating the entire emission limitation." (emphasis added)); compare 80 Fed. Reg. 33,842 (defining "automatic exemption" as "a generally applicable provision in a SIP that would provide that if certain conditions existed during a period of excess emissions, then those exceedances would not be considered violations of the applicable emission limitations.") with Black's Law Dictionary, *Exception* ("In statutory law. An exception in a statute is a clause designed to reserve or exempt some individuals from the general class of persons or things to which the language of the act in general attaches."), <https://thelawdictionary.org/exception/#:~:text=25.5.An%20exception%20is%20an,Proc.>

80 Fed. Reg. 33,840, 33,965 (June 12, 2105) (“[T]he Petitioner objected to three generally applicable provisions in the Illinois SIP which together have the effect of providing discretionary exemptions from otherwise applicable SIP emission limitations.”).

Industry Comment on the SMB Provisions and U.S. EPA SIP Calls

Other participants to this rulemaking, particularly Illinois Environmental Regulatory Group (“IERG”), also submitted evidence to the Board showing that Illinois’s SMB provisions function as exemptions. IERG submitted prefiled testimony of Kelly Thompson, stating “it has been the regulated community’s long-standing interpretation that having such an authorization in a permit means that the facility is authorized to exceed the applicable limitation during SMB and Illinois EPA will not initiate an enforcement action for such exceedances. In essence, it has been the regulated communities’ understanding that these provisions have provided an exemption to the applicable emission standard during periods of SMB.” Pre-Filed Testimony of Kelly Thompson and David R. Wall for the Illinois Environmental Regulatory Group at 11 (Feb. 6, 2023), *In the Matter of: Amendments to 35 Ill. Adm. Code Parts 201, 202, and 212*, R2023-018 (hereinafter “IERG Prefiled Testimony”).

Dynegy and Midwest Generation’s Operations and CAAPP Permit Conditions

Dynegy operates permitted coal-fired boilers at the Baldwin Energy Complex, I.D. No. 157851AAA (“Baldwin”), located at 10901 Baldwin Road, Baldwin, Illinois (Randolph County); Kincaid Power Station, I.D. No. 021814AAB (“Kincaid”), located on Route 104, four miles west of Kincaid, Illinois (Christian County); and the Newton Power Station, I.D. No. 079808AAA (“Newton”), located at 6725 North 500th Street, Newton, Illinois (Jasper County). There are two permitted coal-fired boilers at Baldwin, denominated as Boilers 1 and 2, two permitted coal-fired

boilers at Kincaid, denominated as Boilers 1 and 2 and one permitted coal-fired boiler at Newton, denominated as Boiler 1.

Baldwin Boilers 1 and 2 were built in 1967, have a nominal capacity of 5,788 mmBtu/hr, each, and are served by separate stacks. Kincaid Boilers 1 and 2 were built in 1967 and 1968, have nominal capacities of 6634 and 6406 mmBtu/hour, and are served by a single stack. Newton Boiler 1 was built in 1972, has a nominal capacity of 6,000 mmBtu/hour, and is served by a single stack. Opacity from the stacks at each Station is monitored by continuous opacity monitoring systems (“COMS”).

Emissions from the Baldwin and Kincaid coal-fired boilers are controlled by numerous air pollution control equipment and measures, including the following: particulate matter (“PM”) emissions are controlled by electrostatic precipitators (“ESPs”); nitrogen oxide (“NO_x”) emissions are controlled by over-fire air (“OFA”) and selective catalytic reduction (“SCR”) systems; and mercury emissions are controlled by activated carbon injection (“ACI”) systems, which injects a sorbent such as activated carbon into the flue gas of each boiler prior to its ESP, or by burning refined coal. Further, PM emissions from the Baldwin coal-fired boilers are also controlled by baghouses, and sulfur dioxide (“SO₂”) emissions are controlled by flue gas desulfurization (“FGD”) systems. SO₂ emissions from the Kincaid coal-fired boilers are controlled by the use of Powder River Basin low sulfur sub-bituminous coal and a dry sorbent injection (“DSI”) FGD system, which injects a dry sorbent material such as sodium bicarbonate into the flue gas of each boiler prior to its ESP.

Emissions from Newton Boiler 1 are controlled by numerous air pollution control equipment and measures, including the following: PM emissions are controlled by an ESP equipped with Flue Gas Conditioning (“FGC”) system, the FGC system injects SO₂ upstream of

the ESP and is operated on an as-needed basis; SO₂ emissions are controlled by a DSI FGD system, which injects a dry sorbent material such as sodium bicarbonate into the flue gas prior to the ESP; NO_x emissions are controlled by low-NO_x burners and OFA systems; an ACI system controls mercury emissions by injecting a sorbent such as activated carbon into the flue gas prior to the ESP, and calcium bromide may be applied to the coal fired in the boiler from time to time to further reduce mercury emissions.

MWG operates permitted coal-fired boilers at Powerton Generating Station, I.D. No. 179801AAA (“Powerton”), located at 13082 East Manito Road, Pekin, IL (Tazewell County). Powerton has four coal-fired boilers, supplying steam to two electrical generators. Boilers 51 and 52 serve one generator (Unit 5), and boilers 61 and 62 power the other generator (Unit 6) (these boilers, collectively with Dynegy’s boilers and as applicable to the specific facilities, will be referred to as “Affected Units”). The Powerton Affected Units utilize various air pollution control equipment and measures, including the following: PM emissions are controlled by ESPs, SO₂ emissions are reduced by each Affected Unit burning low-sulfur Powder River Basin coal as its primary fuel; SO₂ emissions are controlled by dry sorbent injection into the duct work at a points prior to the ESPs; NO_x emissions are controlled by OFA systems, rich reagent injection systems, and selective non-catalytic reduction systems; and mercury emissions are controlled by activated carbon injection into the flue gas prior to the ESPs.

The Baldwin, Kincaid, Newton, and Powerton (the “Stations”) Clean Air Act Permit Program (“CAAPP”) Permits specify applicable opacity standards under the Illinois regulations, and each permit provides an exception to the applicable opacity standards during SMB. *See* Dynegy’s Prefiled Testimony of Cynthia Vodopivec at 10 (Feb. 6, 2023), *In the Matter of: Amendments to 35 Ill. Adm. Code Parts 201, 202, and 212*, R2023-018 (hereinafter “Vodopivec

Prefiled Testimony”); *see also* Midwest Generation’s Prefiled Testimony of Sharene Shealey at 6 (Feb. 6, 2023), *In the Matter of: Amendments to 35 Ill. Adm. Code Parts 201, 202, and 212*, R2023-018 (hereinafter “Shealey Prefiled Testimony”).

Each of the Stations’ CAAPP permits further include a Compliance Assurance Monitoring (“CAM”) plan. *See* Vodopivec Prefiled Testimony, Ex. A at 81–88 (Baldwin), Ex. B at 92–97 (Kincaid), Ex. C at 79–83 (Newton); Shealey Prefiled Testimony, Ex. A at 100–104 (Powerton). According to U.S. EPA, the purpose of a CAM plan is as follows:

[CAM] is intended to provide a reasonable assurance of compliance with applicable requirements under the Clean Air Act (CAA) for large emission units that rely on pollution control device equipment to achieve compliance. Monitoring is conducted to determine that control measures, once installed or otherwise employed, are properly operated and maintained so that they continue to achieve a level of control that complies with applicable requirements. The CAM approach establishes monitoring for the purpose of: (1) documenting continued operation of the control measures within ranges of specified indicators of performance (such as emissions, control device parameters, and process parameters) that are designed to provide a reasonable assurance of compliance with applicable requirements; (2) indicating any excursions from these ranges; and (3) responding to the data so that the cause or causes of the excursions are corrected.

U.S. EPA, Office of Air Quality Planning & Standards, *Technical Guidance Document: Compliance Assurance Monitoring, Revised Draft* (Aug. 1998), <https://www.epa.gov/sites/default/files/2016-05/documents/cam-tgd.pdf>.

1. Dynegy’s Baldwin and Kincaid CAAPP Permits

As specified in Condition 5.2.2(b) of the Baldwin and Kincaid CAAPP permits, the Baldwin and Kincaid Affected Units are subject to the 30% opacity limitation set forth at “35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) or 212.124.” Vodopivec Prefiled Testimony at 10–11; Ex. A at 16; Ex. B at 13 (emphasis added). Section 212.124 is titled “Exceptions” and lays out a number of exceptions to Illinois’s opacity limitations set forth in Sections 212.122 and 212.123. 35 Ill. Admin. Code § 212.124. There are four subsections, plus subparagraphs, setting

forth the exceptions to the opacity limitations. *Id.* The first of these is most pertinent to the Kincaid and Baldwin permits. Section 212.124(a) provides: “Sections 212.122 and 212.123 of this Subpart shall apply during times of startup, malfunction and breakdown except as provided in the operating permit granted in accordance with 35 Ill. Adm. Code 201.” 35 Ill. Admin. Code § 212.124(a). Meaning that Section 212.123 (the section setting forth the applicable opacity limitations) does not apply to the Baldwin or Kincaid Affected Units during times of startup, malfunction and breakdown, to the extent provided by their CAAPP permits.

The SMB authorizations/exceptions applicable to the Baldwin and Kincaid Affected Units are set forth in Conditions 7.1.3(b) and (c) of their CAAPP permits (for all permits, the “SMB Authorizations”). Vodopivec Prefiled Testimony at 11–13; Ex. A at 49–50; Ex. B at 54. Condition 7.1.3(b) contains the exception from opacity standards during startups. *Id.* (“[T]he Permittee is authorized to operate an affected boiler in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123) . . . during startup. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262 . . .”). Further, Condition 7.1.3(c) of the Baldwin and Kincaid permits contains the exception from opacity standards during malfunctions and breakdowns. *Id.* (“[T]he Permittee is authorized to continue operation of an affected boiler in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123) . . . in the event of a malfunction or breakdown of an affected boiler, including the coal crusher, the ash removal system, or the electrostatic precipitator. This authorization is provided pursuant to 35 IAC 201.149, 201.261, and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment . . .”). Finally, Conditions 7.1.3(b)(iv) and (c)(v) reference 35 Ill. Admin.

Code § 201.265, stating that authorization for “excess emissions” provides a prima facie defense to enforcement actions, “provided that the Permittee has fully complied with all terms and conditions connected with such authorization.” *Id.*

2. Dynegy’s Newton CAAPP Permit

As specified in Condition 5.2.2(c) of the Newton CAAPP permit, the Newton Affected Unit is subject to the 20% opacity limitation set forth at “35 IAC 212.122(a), except as allowed by 35 IAC 212.122(b) or 212.124” *See* Vodopivec Prefiled Testimony at 13; Ex. C at 16 (emphasis added). And, as described above, Section 212.124 sets forth exceptions to both Section 212.122 and Section 212.123. *See* 35 Ill. Admin. Code § 212.124. The SMB exceptions to the Section 212.122 opacity limitations for the Newton Affected Unit are set forth in Conditions 7.1.3(b) and (c) of the Newton CAAPP permit. These conditions largely mirror the corresponding conditions in the Baldwin and Kincaid CAAPP permits for exceptions to the opacity limitations, with the differences being outlined in Cynthia Vodopivec’s testimony. *See id.* at 14.

3. MWG’s Powerton CAAPP Permit

This classification of Illinois’s SMB provisions as exceptions continues through Midwest Generation’s Powerton CAAPP permit. Condition 7.1.4(a) provides that the Affected Units are subject to “the standard in Condition 5.2.2(b) [35 Ill. Admin. Code § 212.123].” *See* Shealey Prefiled Testimony at 6, Ex. C at 49. Condition 5.2.2(b) provides in relevant part: “No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent . . . pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.” *Id.*, Ex. C at 16 (emphasis added). And, as described above, Section 212.124 sets forth exceptions to both Section 212.122 and Section 212.123. *See* 35 Ill. Admin. Code § 212.124. The SMB exceptions to the Section 212.123 opacity limitations for the Powerton Affected Unit are set

forth in Conditions 7.1.3(b) and (c) of the Powerton CAAPP permit. These conditions largely mirror the corresponding conditions in the Dynegy CAAPP permits for exceptions to the opacity limitations; a more detailed description is provided in Sharene Shealey's testimony. *See id.* at 6–8 ¶¶ 7–11.

POSITION

The Companies propose to codify an opacity limit during SMB events, utilizing an alternative averaging period and a limit on the maximum opacity level, to address the 2015 Final SIP Call, as an addition to IEPA's Proposed Rule (the "Joint Proposal"). This is intuitively and demonstrably more stringent than the current SMB exception in the Stations' CAAPP permits, which contains no limit on the duration of an event or level of opacity. Clearly, adding opacity limits that apply during SMB events, when no such limits currently exist, passes any test used to determine whether a rule is more stringent with such requirements than without. Adding in additional work practice standards designed to minimize the frequency, duration, and level of opacity during SSM periods, again when no such standards exist in the current rule, further demonstrates that the Joint Proposal is more stringent than current regulations.

The Joint Proposal would be codified as a new subsection to 35 Ill. Admin. Code § 212.124. It complements the Proposed Rule as an additional revision to the regulations, and it would not require any change to the revisions in the Proposed Rule. If the Board adopts IEPA's Proposed Rule and the Companies' Joint Proposal, these revised regulations, viewed together, could and should be approved into the Illinois SIP. The Joint Proposal would not add any risk of SIP disapproval for IEPA's Proposed Rule as it does not alter the Proposed Rule.

I. Joint Proposal – Overview

Dynegy and MWG presented nearly identical proposals through their witnesses' prefiled testimony. *Compare* Vodopivec Prefiled Testimony at 17–19 *with* Shealey Prefiled Testimony at 10–12. The proposals differed only with respect to which boilers were included and which opacity standard (20% or 30%) applied. The Companies have combined their proposals into a Joint Proposal, which is attached for review as **Exhibit A**. The Joint Proposal is identical to the proposal in Dynegy's prefiled testimony, except that it includes the Powerton Affected Units and the proposed citation has been changed from Section 212.124(d) to Section 212.124(e).

Under the Joint Proposal, when compliance cannot be demonstrated with Section 212.122 or 212.123 on a six-minute average basis during times of SMB, the Companies would have the option to demonstrate compliance with the State 20% or 30% opacity limitation for the Newton Affected Unit or the Baldwin, Kincaid or Powerton Affected Units, respectively, using a three-hour averaging period (the "Alternative Averaging Period"). This would be accomplished for a given six-minute block period when the Alternative Averaging Period is needed by taking the average opacity measurements from the COMS for those six minutes and the preceding 174 minutes of data. This Alternative Averaging Period is modeled on each Affected Unit's CAM plan for the applicable state PM limitation, which utilize three-hour opacity data to provide a reasonable assurance of compliance with the PM limitations promulgated to assure compliance with the various PM National Ambient Air Quality Standards ("NAAQs").

The Joint Proposal includes recordkeeping and reporting obligations and work practice requirements that are more stringent than those required by existing Illinois regulations. It would not affect any additional permit-specific terms that IEPA established as a condition for utilizing the current SMB exceptions. The Joint Proposal would be codified as a new subsection to Section

212.124, and, as explained further in Part D below, it would not require any change to the revisions proposed by IEPA's Proposed Rule.

II. The Current SMB Authorizations Are Exceptions to the Opacity Standards

U.S. EPA, environmental advocacy groups, and the Companies all agree—the current regulatory SMB provisions are *exceptions* to the applicable opacity standards. And, IEPA's implementation of these provisions when issuing CAAPP permits for each Station expressly authorizes the Companies to exceed the applicable regulatory opacity standards during SMB, with no express limit to the magnitude or duration of such excess opacity. The Board's opacity regulations leave no doubt that the SMB authorizations in the Companies' CAAPP permits are exceptions. These authorizations fall within the scope of Section 212.124(a)—the first provision under the unambiguous title, “Exceptions.”

This plain interpretation is supported by (1) U.S. EPA classifying Illinois's SMB provisions as exemptions, (2) Sierra Club classifying Illinois's SMB provisions as exemptions in its petition challenging certain SIPs, and (3) other participants in this rulemaking classifying the SMB provisions as exemptions. In Sierra Club's petition that prompted U.S. EPA's Initial SIP Call, Sierra Club described Illinois SMB provisions as “discretionary exemptions from otherwise applicable SIP emission limitations.” 78 Fed. Reg. at 12,514. U.S. EPA agreed in both its Initial and Final SIP Calls, classifying Illinois's SMB provisions as “exemptions.” *Id.* And testimony in this rulemaking makes clear that this is how Industry has understood Illinois's SMB provisions. *See, e.g.,* IERG Prefiled Testimony at 9 (“[I]t has been the regulated community's long-standing interpretation that having such an authorization in a permit means that the facility is authorized to exceed the applicable limitation during SMB and Illinois EPA will not initiate an enforcement action for such exceedances. In essence, it has been the regulated communities' understanding that

these provisions have provided an exemption to the applicable emission standard during periods of SMB.”); Vodopivec Prefiled Testimony at 12–13; Shealey Prefiled Testimony at 6–9 ¶¶ 7–14.

The Stations’ CAAPP permits clearly state that the Companies are “authorized” to operate “in violation of” the applicable opacity standards during SMB, subject to permit-specific terms that apply in order to qualify for the exception. They further grant the Companies “permit shields,” which provide that “compliance with the conditions” of the permits “shall be deemed compliance with applicable requirements.” IEPA now takes the position in this rulemaking that Section 212.124(a)—the first paragraph in the section titled “Exceptions”—is not actually an exception, and that permit “authorized” exceedances of the standards are, in reality, violations of law. Statement of Reasons at 18 (“[T]he Agency still considers excess emissions during [SMB] to be violations, and the advance permission granted in the operating permit under Part 201 simply allows a source to assert a *prima facie* defense should those violations be the subject of an enforcement proceeding.”). This interpretation is incompatible with the plain language of the permits and regulations; it is the opposite of what the permits and regulations say.

When the Companies’ CAAPP permits authorize violations of the opacity standards, the word “violation” is used to mean a numeric exceedance of the applicable standard, not a violation of law. The word “violation” is commonly used in this manner in Clean Air Act parlance. *See, e.g.,* 40 C.F.R. Part 50, App. R ¶ 1(a) (using “violated” to mean “not met”: “the Pb NAAQS were violated (*i.e., not met*)”); 80 Fed. Reg. at 33,977 (defining “excess emissions” to mean “emission that would be considered violations of the applicable emission limitation”). This is the only possible interpretation of “violation” in the context of these permit conditions. IEPA has clear discretion to authorize the Companies to exceed the opacity limitations during SMB events, and that is exactly what it did. It strains credulity to say that an “authorized” violation of a standard

is, in fact, prohibited, *i.e.*, a violation of the law. And because Condition 8.1 of each Station's CAAPP permit states that compliance with the relevant permit conditions "shall [be] deemed compliance" with underlying regulatory requirements, compliance with the SMB Authorizations cannot be considered non-compliance or a violation of law.

IEPA argues that these authorizations do nothing more than provide a prima facie defense to an enforcement action. *See* Statement of Reasons at 18. Not so. The Companies agree that 35 Ill. Admin. Code § 201.265 and the CAAPP permits provide a prima facie defense to an enforcement action, in case a plaintiff alleges that an opacity exceedance constitutes a violation of law. 35 Ill. Admin. Code § 201.265 ("The granting of permission to operate during a malfunction or breakdown, or to violate the standards or limitations of Subchapter c of this Chapter during startup, and full compliance with any terms and conditions connected therewith, shall be a prima facie defense to an enforcement action alleging a violation of Section 201.149.") But the provision of a prima facie defense does not negate the authorization to exceed the standard in the first place; to the contrary, the defense relies on the authorization. The prima facie defense makes sense *only* because the Companies are *authorized* to exceed the standards. The authorization (the "granting of permission" to exceed the standards, contingent on "compliance" with related "terms and conditions") is the express basis for the prima facie defense in Section 201.265.

The Board's opacity regulations confirm the obvious—when IEPA grants SMB authorizations, as it did in the Stations' CAAPP permits, those authorizations are "exceptions." The Stations' CAAPP permits state that the Affected Units are subject to either the 20% or 30% opacity limitation, "except as allowed by . . . 212.124." Section 212.124 is titled "Exceptions" and provides a number of exceptions to the limitations set forth in Sections 212.122 and 212.123. 35 Ill. Admin. Code § 212.124. The first of these exceptions, Section 212.124(a), states: "Sections

212.122 and 212.123 of this Subpart shall apply during times of startup, malfunction and breakdown except as provided in the operating permit granted in accordance with 35 Ill. Adm. Code 201.” *Id.* § 212.124(a) (emphasis added). This means that the opacity limits in Sections 212.122 and 212.123 do not apply to the Affected Units during SMB, to the extent provided by their CAAPP permits. As U.S. EPA acknowledges, an exemption provides that a source does not have to meet a limit during specified events. 80 Fed. Reg. at 33,977. Simply put, the CAAPP permit SMB authorizations for opacity are exceptions to the opacity standards.

III. U.S. EPA Allows SIPs to Include Alternative Emission Limits During Specified Modes of Operations.

In its 2015 Final SIP Call, U.S. EPA stated that it is appropriate for states to promulgate rules that contain components applicable to different modes of operation and numerical emission limitations that have differing levels and forms for different modes of operations. *See* 80 Fed. Reg. at 33,977–79. U.S. EPA recognized that there are mechanisms states can employ that do not violate the Clean Air Act to address excess emissions that may occur during certain events. Specifically, U.S. EPA provided as follows:

While automatic exemptions and director’s discretion exemptions from otherwise applicable emission limitations for SSM events are not consistent with the CAA, SIPs may include criteria and procedures for the use of enforcement discretion by air agency personnel Similarly, SIPs may, rather than exempt excess emissions, include emission limitations that subject those emissions to alternative numerical limitations or other control requirements during startup and shutdown events or other normal modes of operation, so long as those components of the emission limitations meet applicable CAA requirements and are legally and practically enforceable.

Id. at 33,978. U.S. EPA does not “interpret section 110(a)(2) or section 302(k) to require that an emission limitation in a SIP provision be composed of a single, uniformly applicable numerical emission limitation. The text of section 110(a)(2) and section 302(k) does not require states to impose emission limitations that include a static, inflexible standard.” *Id.* Instead, the Clean Air

Act requires that the “SIP provision impose limits on emissions on a continuous basis, regardless of whether the emission limitation as a whole is expressed numerically or as a combination of numerical limitations, specific control technology requirements and/or work practice requirements applicable during specific modes of operation, and regardless of whether the emission limitation is static or variable.” *Id.* at 33,978–79. “For example, so long as the SIP provision meets other applicable requirements, it may impose different numerical limitations for startup and shutdown.” *Id.* at 33,979.

IV. The Joint Proposal is Consistent with U.S. EPA Recommendations from the 2015 Final SIP Call

The 2015 Final SIP Call includes a short section titled, “Recommendations for Development of Alternative Emission Limitations Applicable During Startup and Shutdown.” 80 Fed. Reg. at 33980. In this section, U.S. EPA recommends that alternative requirements be narrowly tailored and take into account considerations such as the technological limitations of the specific source category and the control technology that is feasible. *Id.* U.S. EPA goes on to recommend seven specific criteria “as appropriate considerations for developing emissions limitations in SIP provisions.” *Id.* (emphasis added). But before providing any of these seven considerations, U.S. EPA “encourages states to explore . . . approaches” similar to those taken in New Source Performance Standards (“NSPS”) regulations. *Id.* U.S. EPA concludes its recommendations by admonishing that alternative emission limitations “cannot allow an inappropriately high level of emissions or an effectively unlimited or uncontrolled level of emissions.” *Id.*

While U.S. EPA’s recommendations are not legal requirements, the Companies carefully drafted the Joint Proposal to satisfy U.S. EPA’s recommendations. This is particularly evident

when comparing the Joint Proposal to the startup, shutdown, and malfunction exclusion provided by relevant NSPS regulations, as U.S. EPA encourages states to do.

A. The Joint Proposal is limited to just a handful of specific sources.

U.S. EPA recommends considering whether the alternative limitation applies to only “specific, narrowly defined source categories using specific control strategies (*e.g.*, cogeneration facilities burning natural gas and using selective catalytic reduction).” *Id.* The Joint Proposal is, in fact, even more narrowly tailored.

The Joint Proposal applies to a total of only nine specifically enumerated coal-fired boilers, located at just four coal-fired power stations. By focusing on nine specific units, the Board (and, ultimately, U.S. EPA) can know exactly which emission units may benefit from the proposal, and how the proposal will affect each specific emission unit. This provides a clear picture of what impact the proposal will have on the operation of (and related emissions from) those units.

Consequently, U.S. EPA’s first consideration weighs in favor of promulgating the Joint Proposal.

B. It is technically infeasible to avoid all opacity exceedances during SMB.

U.S. EPA recommends considering whether control strategies are technically infeasible. *Id.* The Companies’ testimony and responses to Board questions demonstrate that it is technically infeasible to ensure compliance with opacity 100% of the time during SMB.

MWG’s witness, Sharene Shealey, testified that “it is infeasible for the company to comply with the opacity standards 100% of the time during periods of SMB.” Shealey Prefiled Testimony at 9 ¶ 15. Dynegy’s witness, Cynthia Vodopivec, likewise testified that the Dynegy Affected Units cannot comply with their opacity limitations 100% of the time during periods of SMB. Vodopivec Prefiled Testimony at 17. Ms. Vodopivec provided some examples explaining why.

Some of these opacity events are caused by ESP malfunctions. ESPs are large, complex systems that place an electrical charge on particles, which are then collected on oppositely charged collector plates. These systems, like all others, may experience problems even with the most vigilant operating and maintenance measures and procedures. Unexpected issues that can occur that may result in lower control efficiency and increased opacity include loss of adequate power to collector plates, inability to rap and clean the collector plates sufficiently, and broken electrodes or related equipment.

Id. at 17–18.

Ms. Vodopivec emphasized that the “risk of exceedances occurs even at the [Dynergy] Affected Units that are controlled by both ESPs and baghouses.” *Id.* at 18. This risk is supported by data Dynergy submitted on March 1, 2023, in response to questions it received at the February 16, 2023 hearing (“Dynergy’s Response to Questions”). The third page of Exhibit A to Dynergy’s Response to Questions presents 6-minute opacity data for Baldwin boiler 2 (which is controlled by both an ESP and a baghouse) for a three-hour period on December 24, 2022. Dynergy’s Responses to Questions Received at Hearing, Ex. A at 1 (Mar. 1, 2023), *In the Matter of: Amendments to 35 Ill. Adm. Code Parts 201, 202, and 212*, R2023-018 (hereinafter “Dynergy’s Responses”). Four of those six-minute periods (beginning at 10:06, 11:06, 11:24, and 11:48) recorded average opacity of 30%. *Id.* Those six-minute periods complied with the applicable 30% standard, but they came precariously close to exceeding the standard. They stand in stark contrast to typical opacity for that boiler; in 2022, the average opacity was just 3%. Dynergy’s Responses at 2.

These data demonstrate that equipping a coal-fired boiler with both an ESP *and* a baghouse is no guarantee that the boiler could comply with a 30% opacity standard (or a 20% standard). But, even if adding baghouses could allow the Companies to assure compliance 100% of the time, there is no way that baghouses could be designed, procured, and installed prior to the Board’s final action on IEPA’s Proposed Rule. The Companies would require time to add baghouses to those

Affected Units not currently equipped with them. And that investment of resources would need to be weighed against the fact that Dynegy has announced it plans to retire the Kincaid and Newton Affected Units by July 17, 2027, Vodopivec Prefiled Testimony at 6–7, and MWG plans to retire its Affected Units on or before January 1, 2030. Shealey Prefiled Testimony at 5 ¶ 5.

Consequently, U.S. EPA’s second consideration weighs in favor of promulgating the Joint Proposal.

C. The Joint Proposal imposes work practices designed to minimize the frequency and duration of operation in SMB.

U.S. EPA recommends considering whether the “alternative emission limitation requires that the frequency and duration of operation in startup or shutdown mode are minimized to the greatest extent practicable.” 80 Fed. Reg. at 33,980.

The Joint Proposal imposes work practices designed to minimize the frequency and duration of operation in SMB. Specifically, Section 212.124(e)(3)(B) of the Joint Proposal requires compliance with the following work practices as a condition of relying on the Alternative Averaging Period: “Use good engineering practices and best efforts to minimize the frequency and duration of operation in startup, malfunction and breakdown.” **Ex. A.**

As such, the third consideration weighs in favor of promulgating the Joint Proposal.

D. IEPA has already determined that compliance with the Alternative Averaging Period would assure compliance with applicable State PM limitations.

U.S. EPA recommends considering whether, “[a]s part of its justification of the SIP revision, the state analyzes the potential worst-case emissions that could occur” based on the applicable alternative emission limitation.” 80 Fed. Reg. at 33,980.

If the Board promulgates the Joint Proposal and IEPA submits it to U.S. EPA for incorporation into the Illinois SIP, IEPA will be able to represent that it considered the potential

worst-case emissions that could occur during SMB. That representation would not require any complex new analysis. In fact, the analysis has already been done.

IEPA has already determined that compliance with the Alternative Averaging Period in the Joint Proposal would assure compliance with applicable state PM limitations—the pollutant the opacity standard is intended to address. The Alternative Averaging Period is modeled on the Affected Units’ federally enforceable CAM plans to assure continuous compliance with the applicable PM standards. Those CAM plans utilize opacity as an “indicator,” and set the indicator level at either 20% (Newton) or 30% (Baldwin, Kincaid and Powerton) over a rolling 3-hour period. The CAM plans are intended to provide a reasonable assurance of compliance with the PM standards to ensure compliance with the PM NAAQs² and are incorporated in the Stations’ CAAPP permits. U.S. EPA reviewed those permits and did not object to them.

For example, the CAM plans for the Dynegy Affected Units state as follows: “The opacity indicator level has been established at a level that provides reasonable assurance that particulate matter emissions are in compliance when opacity is equal to or less than the indicator level.” Vodopivec Prefiled Testimony, Ex. A at 84, 85, 87 (Baldwin), Ex. B at 96, 97 (Kincaid), Ex. C at 83 (Newton). The Powerton CAM plan uses slightly different language to draw the same conclusion: “Opacity less than 30 percent averaged over a rolling 3-hour period is an indicator of proper ESP operation and provides reasonable assurance of meeting the 0.1 lb/mmBtu PM limit.” Shealey Prefiled Testimony, Ex. A at 104.

By using a three-hour average of data, the Board and U.S. EPA can be assured that use of the Alternative Averaging Period would ensure that the Affected Units’ opacity during SMB

² See U.S. EPA, *Compliance Assurance Monitoring* (last updated Sept. 6, 2022), [https://www.epa.gov/air-emissions-monitoring-knowledge-base/compliance-assurance-monitoring#:~:text=Compliance%20assurance%20monitoring%20\(CAM\)%20is,device%20equipment%20to%20achieve%20compliance](https://www.epa.gov/air-emissions-monitoring-knowledge-base/compliance-assurance-monitoring#:~:text=Compliance%20assurance%20monitoring%20(CAM)%20is,device%20equipment%20to%20achieve%20compliance).

events does not exceed the applicable state PM limitations. As such, it is consistent with the Illinois SIP for PM emissions.

Moreover, the Joint Proposal is more stringent than the SMB Authorizations currently applicable to the Affected Units. As discussed above, the current SMB Authorizations do not include any limit on the duration of opacity events or the maximum level of opacity during such events. In fact, Dynegey's Response to Questions included actual opacity data from Newton and Kincaid that exceeded 20% or 30%, respectively, on a three-hour average basis—opacity levels currently authorized but that would be prohibited under the Joint Proposal. Dynegey's Responses, Ex. A at 1–2. This demonstrates that opacity (and emissions) would be no higher, and may in fact be lower, under the Joint Proposal than currently allowed under the SMB Authorizations.

For these reasons, the fourth consideration weighs in favor of promulgating the Joint Proposal. Notably, these reasons also demonstrate that the Joint Proposal would not “allow an inappropriately high level of emissions or an effectively unlimited or uncontrolled level of emissions.” 80 Fed. Reg. at 33,980.

E. The Joint Proposal would minimize any impact on ambient air quality.

U.S. EPA recommends considering whether the “alternative emission limitation requires that all possible steps are taken to minimize the impact of emissions”. 80 Fed. Reg. at 33,980. Based on the work practices described in Section IV.C and F of this Comment, coupled with the points addressed in Section IV.D, it is clear that the Joint Proposal (a) would have no negative impact (and may, in fact, have a positive impact) on ambient air quality, when compared with the current SMB Authorizations, and (b) would not interfere with any applicable requirement concerning attainment and reasonable further progress.

Consequently, the fifth consideration weighs in favor of promulgating the Joint Proposal.

F. The Joint Proposal imposes work practices designed to minimize opacity.

U.S. EPA recommends considering whether the “alternative emission limitation requires that, at all times, the facility is operated in a manner consistent with good practice for minimizing emissions and the source uses best efforts regarding planning, design, and operating procedures.” 80 Fed. Reg. at 33,980.

The Joint Proposal imposes work practices designed to minimize opacity, which has the effect of also minimizing the particulate emissions that result in opacity. Specifically, Section 212.124(e)(3)(A) of the Joint Proposal requires compliance with the following work practices as a condition of relying on the Alternative Averaging Period: “Operate the coal-fired boiler and related air pollution control equipment in a manner consistent with good engineering practice for minimizing opacity during such startup, malfunction or breakdown.”

As such, the sixth consideration weighs in favor of promulgating the Joint Proposal.

G. The Joint Proposal imposes detailed recordkeeping and reporting requirements.

U.S. EPA recommends considering whether the alternative emission limitation requires that the owner or operator’s actions are documented by properly signed, contemporaneous operating logs or other relevant evidence. 80 Fed. Reg. at 33,980.

Section 212.124(e)(2) of the Joint Proposal imposes detailed recordkeeping requirements as a condition to relying on the Alternative Averaging Period *and* requires that those records be reported to IEPA. The Companies based these requirements on the recordkeeping requirements that IEPA currently imposes as part of the SMB Authorizations in the CAAPP permits for these Stations.

The seventh consideration, like the other six, weighs in favor of promulgating the Joint Proposal.

H. The Joint Proposal is more stringent than the relevant NSPS SSM exclusion

U.S. EPA “encourages states to explore . . . approaches” to startup and shutdown events such as those taken in NSPS regulations. 80 Fed. Reg. 33,916. A fitting example is contained in the Newton CAAPP permit. In addition to being subject to the state 20% opacity limit, the Newton Affected Unit is also subject to a 20% opacity limit pursuant to NSPS, Subpart D. As summarized by Condition 7.1.4(a)(iii) of the Newton CAAPP permit, “Opacity from the affected boiler shall not exceed 20 percent, as measured on a six minute average, except for one 6 minute period per hour of not more than 27 percent pursuant to NSPS, 40 CFR 60.42(a)(2).” Vodopivec Prefiled Testimony, Ex. C at 49.

Of note, the permit goes on to provide an SMB exception to the 20% NSPS limitation, pursuant to 40 C.F.R. §§ 60.8(c) and 60.11(c), stating that the “limitations do not apply during startup, shutdown, and malfunctions, as defined by 40 CFR 60.2,” though such exceedances “are still subject to recordkeeping and reporting requirements under the NSPS.” Vodopivec Prefiled Testimony, Ex. C at 49 (Condition 7.1.4(a)(iv)). This SMB exception is broader (and less stringent) than the Joint Proposal because it applies to *all* shutdowns, irrespective of whether the excess opacity occurs during periods of malfunction or breakdown. And the NSPS startup, shutdown, and malfunction exception imposes no opacity limit.

Because the Joint Proposal is *narrower* than the NSPS startup, shutdown, and malfunction exception, it should be approved.

V. The Joint Proposal Compliments IEPA’s Proposed Rule and does not Jeopardize Approvability

The Joint Proposal does not require or suggest altering any of the revisions IEPA proposes through its Proposed Rule. Rather, the Companies drafted the Joint Proposal to fit squarely within the framework contemplated by IEPA’s proposed revisions to Section 201.149:

No person shall cause or allow the continued operation of an emission source during malfunction or breakdown of the emission source or related air pollution control equipment if such operation would cause a violation of the applicable standards or limitations set forth in Subchapter c of this Chapter except as specifically provided for by such standard or limitation. ~~unless the current operating permit granted by the Agency provides for operation during a malfunction or breakdown.~~ No person shall cause or allow violation of the applicable standards or limitations set forth in that Subchapter during startup except as specifically provided for by such standard or limitation. ~~unless the current operating permit granted by the Agency provides for violation of such standards or limitations during startup.~~

The underscored text, which IEPA proposes to add to Section 201.149, expressly contemplates that individual standards and limitations in Subchapter C (including the Part 212 opacity standards) may specifically provide for exceptions for emissions or opacity during SMB events. That is precisely what the Joint Proposal would do.

CONCLUSION

The Joint Proposal would provide narrowly tailored relief to allow the Companies to continue compliant operation of the Affected Units, recognizing that it is not possible to avoid opacity exceedances 100% of the time during periods of SMB. The Joint Proposal includes limits that would apply during periods of SMB, as well as work practices designed to minimize the frequency, duration and level of opacity during such periods, and so it is more stringent than the existing regulations and SMB provisions in the Stations' CAAPP permits. The proposal would not result in any greater opacity—or emissions—than currently authorized. As such, it will not result in backsliding. The Companies drafted the Joint Proposal to satisfy all of U.S. EPA's recommendations in its Final SIP Call for such provisions. For these reasons the Companies believe the Joint Proposal ultimately could and should be approved into the Illinois SIP.

The Companies respectfully request that, if the Board adopts IEPA's Proposed Rule, it also adopt the Companies' Joint Proposal, so that they can continue operating the Affected Units in compliance with state opacity requirements during SMB, as they generate reliable power.

Dated: March 7, 2023

Respectfully submitted,

Dynegy Midwest Generation, LLC; Illinois
Power Generating Company; and Kincaid
Generation, LLC

Midwest Generation, LLC

/s/ Joshua R. More
One of its Attorneys

/s/ Andrew N. Sawula
One of its Attorneys

Joshua R. More
Sarah L. Lode
ARENTFOX SCHIFF LLP
233 South Wacker Drive, Suite 7100
Chicago, Illinois 60606
(312) 258-5500
Joshua.More@afslaw.com
Sarah.Lode@afslaw.com

Andrew N. Sawula
ARENTFOX SCHIFF LLP
One Westminster Place, Suite 200
Lake Forest, Illinois 60045
(847) 295-4336
Andrew.Sawula@afslaw.com

Attorney for Dynegy and Midwest Generation

CERTIFICATE OF SERVICE

I, the undersigned, certify that on this 7th day of March, 2023:

I have electronically served true and correct copies of the Joint Post-Hearing Comment of Dynegy and Midwest Generation by electronically filing with the Clerk of the Illinois Pollution Control Board and by e-mail upon each person listed in the attached service list.

My e-mail address is Sarah.Lode@afslaw.com.

The number of pages in the e-mail transmission is 32.

The e-mail transmission took place before 5:00 p.m.

/s/ Sarah L. Lode
Sarah L. Lode

Dated: March 7, 2023

Joshua R. More
Sarah L. Lode
ARENTFOX SCHIFF LLP
233 South Wacker Drive, Suite 7100
Chicago, Illinois 60606
(312) 258-5500
Joshua.More@afslaw.com
Sarah.Lode@afslaw.com

Andrew N. Sawula
ARENTFOX SCHIFF LLP
One Westminster Place, Suite 200
Lake Forest, Illinois 60045
(847) 295-4336
Andrew.Sawula@afslaw.com

SERVICE LIST	
Illinois Pollution Control Board Don Brown don.brown@illinois.gov 100 W. Randolph St. Suite 11-500 Chicago, IL 60601	Illinois Environmental Protection Agency Charles E. Matoesian charles.matoesian@illinois.gov Dana Vetterhoffer dana.vetterhoffer@illinois.gov 1021 North Grand Avenue East P.O. Box 19276 Springfield, IL 62794
Office of the Attorney General Molly Kordas molly.kordas@ilag.gov Ann Marie A. Hanohano annmarie.hanohano@ilag.gov 69 West Washington Street, Suite 1800 Chicago, IL 60602 Jason E. James Jason.James@ilag.gov 201 West Point Drive, Suite 7 Belleville, IL 62226	Illinois Department of Natural Resources Renee Snow - General Counsel renee.snow@illinois.gov One Natural Resources Way Springfield, IL 62702
IERG Kelly Thompson kthompson@ierg.org 215 E. Adams St. Springfield, IL 62701	HeplerBroom LLC Melissa S. Brown Melissa.brown@heplerbroom.com Alec Messina Alex.Messina@heplerbroom.com 4340 Acer Grove Drive Springfield, IL 62711
Faith E. Bugel fbugel@gmail.com 1004 Mohawk Rd. Wilmette, IL 60091	Environmental Law and Policy Center Cantrell Jones CJones@elpc.org 35 E. Wacker Drive, Suite 1600 Chicago, IL 60601
Greater Chicago Legal Clinic, Inc. Keith I. Harley kharley@kentlaw.edu 211 West Wacker Drive, Suite 750 Chicago, IL 60606	McDermott, Will & Emery Mark A. Bilut mbilut@mwe.com 227 West Monroe Street Chicago, IL 60606-5096
U.S. EPA – Region 5 Michael Leslie leslie.michael@epa.gov Ralph H. Metcalfe Federal Building 77 West Jackson Blvd. Chicago, IL 60604	

EXHIBIT A

Section 212.124 Exceptions

e) During times of startup of coal-fired boiler 1 or 2 at the Baldwin Energy Complex, coal-fired boiler 1 or 2 at the Kincaid Power Station, coal-fired boiler 1 at the Newton Power Station, or coal-fired boiler 51, 52, 61, or 62 at the Powerton Generating Station, or of malfunction or breakdown of these boilers or the air pollution control equipment serving these boilers, when average opacity exceeds 20 or 30 percent for a six-minute period, as applicable pursuant to Section 212.122(a) or 212.123(a) of this Subpart, compliance with Section 212.122(a) or 212.123(a) may alternatively be demonstrated for that six-minute period as follows.

1) Alternative Averaging Period.

Compliance for that six-minute period may be determined based on a three-hour average of opacity, utilizing opacity readings for those six minutes and the immediately preceding 174 minutes.

2) Recordkeeping and Reporting

A) Any person relying on the Alternative Averaging Period in Section 212.124(e)(1) of this Subpart shall maintain records of such average opacity calculations and shall report such calculations to Illinois EPA as part of the next quarterly excess emissions report for the source.

B) For periods of startup, such report shall include:

1) The date, time, and duration of the startup.

2) A description of the startup.

3) The reason(s) for the startup.

4) An indication of whether or not written startup procedures were followed. If any written startup procedures were not followed, the report shall include any departures from established procedures and any reason the procedures could not be followed.

5) A description of any actions taken to minimize the magnitude or duration of opacity that requires utilization of the Alternative Averaging Period in Section 212.124(e)(1) of this Subpart.

6) An explanation whether similar incidents could be prevented in the future and, if so, a description of the actions taken or to be taken to prevent similar incidents in the future.

- 7) Confirmation of fulfillment of the requirements of Section 212.124(e)(3) of this Subpart.
 - C) For periods of malfunction and breakdown, such report shall include:
 - 1) The date, time, duration (i.e., the length of time during which operation continued with opacity in excess of 20 or 30 percent, as applicable, on a six-minute average basis) until corrective actions were taken or the boiler was taken out of service.
 - 2) A description of the incident.
 - 3) Any corrective actions used to reduce the magnitude or duration of opacity that requires utilization of the Alternative Averaging Period in Section 212.124(e)(1) of this Subpart.
 - 4) Confirmation of fulfillment of the requirements of Sections 212.124(e)(2)(D) and (e)(3) of this Subpart.
 - D) Any person who causes or allows the continued operation of a coal-fired boiler during a malfunction or breakdown of the coal-fired boiler or related air pollution control equipment when such continued operation would require reliance on the Alternative Averaging Period in Section 212.124(e)(1) of this Subpart to demonstrate compliance with Section 212.122 or 212.123 of this Subpart, as applicable, shall immediately report such incident to the Agency by telephone, facsimile, electronic mail, or such other method as constitutes the fastest available alternative, except if otherwise provided in the operating permit. Thereafter, any such person shall comply with all reasonable directives of the Agency with respect to the incident.
- 3) Work Practices
- Any person relying on the Alternative Averaging Period in Section 212.124(e)(1) of this Subpart must comply with the following Work Practices.
- A) Operate the coal-fired boiler and related air pollution control equipment in a manner consistent with good engineering practice for minimizing opacity during such startup, malfunction or breakdown.
 - B) Use good engineering practices and best efforts to minimize the frequency and duration of operation in startup, malfunction and breakdown.

EXHIBIT 3

Vodopivec Prefiled Testimony

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:

AMENDMENTS TO 35 ILL. ADM.
CODE PARTS 201, 202, AND 212

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R2023-018
(Rulemaking – Air)

PREFILED TESTIMONY OF CYNTHIA VODOPIVEC

I. Introduction

My name is Cynthia Vodopivec, and I am presenting testimony in this matter on behalf of Dynegy Midwest Generation, LLC; Illinois Power Generating Company; and Kincaid Generation, L.L.C. (for simplicity of discussion, collectively and individually referred to as “Dynegy”). I am Senior Vice President, Environmental Health and Safety at Dynegy. As part of my duties, I oversee permitting and regulatory development and compliance for air, water, and waste issues at Dynegy’s Illinois generating stations.

Dynegy cannot support the Illinois Environmental Protection Agency’s (IEPA) proposed rule revisions in this proceeding (the Proposed Rule). Instead, my testimony proposes a narrowly tailored addition to the Proposed Rule, in order to establish an alternative averaging period to demonstrate compliance with the applicable opacity standards for Dynegy’s remaining three coal-fired power plants in Illinois during periods of startup, malfunction and breakdown (SMB). I will first provide an overview of Dynegy’s operations in Illinois and will explain Dynegy’s understanding of its current authorizations that apply during periods of SMB. I will then present Dynegy’s proposal, which Dynegy believes would not affect the likelihood of the United States Environmental Protection Agency (U.S. EPA) approving IEPA’s Proposed Rule into the State Implementation Plan (SIP).

II. Summary of Dynegy's Operations in Illinois

Dynegy is an important part of Illinois' economy, particularly in Downstate Illinois, where it is a key component of the State's electrical and natural gas infrastructure, and a major employer and taxpayer. Dynegy and its affiliates own a total of three operating coal-fired generating plants (Baldwin, Kincaid and Newton) and two operating gas-fired generating plants. Dynegy's combined Illinois power generation fleet of over 5,000 megawatts (MW) provides enough electricity to serve over 2.7 million homes and provides reliable 24/7 grid support to the MISO and PJM regional transmission organizations serving Illinois. Dynegy's retail brands serve about 300,000 customers throughout the State, including 218 communities through municipal aggregation contracts.

Dynegy's generation footprint generates substantial economic opportunity for communities in the State. The plants support and sustain approximately 800 direct, indirect, and induced full-time job equivalents; generate over \$80 million in total direct, indirect, and induced income for Illinois workers; and create a total economic output of over \$600 million. Dynegy most recently paid annual sales/use taxes of approximately \$8 million and \$11 million in local property taxes.

Dynegy is committed to supporting Illinois' aggressive timetable for reaching 100% renewable energy by 2050. In 2019, Dynegy, and its affiliates, retired the Duck Creek, Coffeen, Havana and Hennepin coal-fired power plants, and in 2022 we retired our Joppa and Edwards coal-fired power plants. The remaining coal-fired power plants, Baldwin, Kincaid and Newton, are all currently scheduled to close by December 31, 2027. While Dynegy's coal-fired generating fleet has dwindled over the years, Dynegy remains committed to Illinois—its affiliates, including its parent company Vistra Corp., have proposed over \$750 million worth of investments in zero-

carbon renewable energy projects at properties it owns across the state. We plan to build the State's largest fleet of utility-scale solar and battery energy storage facilities in downstate Illinois communities to help the State transition to renewable, zero-emission electricity generation. We expect the first phase of renewable construction projects, made possible through the state's Coal to Solar and Energy Storage Initiative, will support over 2,200 full-time job equivalents and generate \$180 million of total income for workers during the construction phase, and tens of millions in sales/use and, once online, property taxes to support impacted communities.

Recent events have highlighted the importance of the remaining three coal-fired plants (Baldwin, Newton and Kincaid) to electric system reliability, especially during the next four years, as the power supply shifts from thermal resources to intermittent wind and solar resources. Baldwin and Newton operate in the MISO system, which is currently at serious risk of reliability shortfalls. In particular, the most recent MISO Planning Resource Auction indicated a capacity shortfall for the MISO North/Central Regions. This result indicates that these regions are at greater risk of a generation shortfall and a load shed event. Kincaid also remains a critical reliability asset in the PJM system, in particular, as evidenced by the recent events in Winter Storm Elliot. Numerous systems suffered reliability risks, and PJM had 46,000 MWs of forced outages.

III. Dynegy Proposes Narrowly Tailored Additions to IEPA's Proposed Rule to Establish an Alternative Averaging Period to Demonstrate Compliance with Opacity Standards for Dynegy's Coal-Fired Boilers During Periods of Startup, Malfunction and Breakdown, Subject to Monitoring, Recordkeeping, Reporting and Work Practice Requirements.

Dynegy proposes narrowly tailored additions to IEPA's Proposed Rule. The additions would establish an alternative averaging period to demonstrate compliance with applicable opacity standards for the coal-fired boilers at Baldwin, Newton and Kincaid during periods of startup, malfunction and breakdown, subject to strict monitoring, recordkeeping, reporting and work

practice requirements. While Dynegy's emission units have numerous SMB authorizations in their CAAPP permits, Dynegy's proposal is limited to only those standards and units for which it is infeasible for Dynegy to otherwise assure compliance during such times. Dynegy intentionally drafted the proposal to be consistent with, and not affect any language proposed in, IEPA's Proposed Rule. Dynegy's proposal will result in more stringent requirements than what currently apply.

A. The Affected Units.

Dynegy's proposal relates to its permitted coal-fired boilers at the Baldwin Energy Complex, I.D. No. 157851AAA ("Baldwin"), located at 10901 Baldwin Road, Baldwin, IL (Randolph County); Kincaid Power Station, I.D. No. 021814AAB ("Kincaid"), located on Route 104, four miles west of Kincaid, IL (Christian County); and the Newton Power Station, I.D. No. 079808AAA ("Newton"), located at 6725 North 500th Street, Newton, IL (Jasper County). There are two permitted coal-fired boilers at Baldwin, denominated as Boilers 1 and 2, two permitted coal-fired boilers at Kincaid, denominated as Boilers 1 and 2 and one permitted coal-fired boiler at Newton, denominated as Boiler 1. Together, I will refer to these boilers as the "Affected Units." Dynegy operates the Affected Units for electric generation to support power grid reliability.

The Baldwin Affected Units were built in 1967, have a nominal capacity of 5,788 mmBtu/hr, each, and are served by separate stacks. Opacity from the stacks are monitored by continuous opacity monitoring systems (COMS). In addition to coal, these units fire fuel oil as auxiliary fuel during startup and for flame stabilization, and they have the capability to fire a combination of coal and/or fuel oil as their principal fuel. These units are subject to numerous standards and limitations, which are specified in a Clean Air Act Permit Program (CAAPP) Permit

(Application No. 95090026) (**Exhibit A**).¹ This permit had an Initial Effective Date of June 21, 2018, and an Expiration Date of June 21, 2023. Dynegy timely submitted a renewal permit application on July 1, 2022. Dynegy currently plans to cease operation and retire the Baldwin Affected Units on or before December 31, 2025, in accordance with the federal CCR Rule.

Emissions from each Baldwin Affected Unit are controlled by numerous air pollution control equipment and measures, including: particulate matter (PM) emissions are controlled by electrostatic precipitators (ESPs) and baghouses; nitrogen oxide (NO_x) emissions are controlled by over-fire air (OFA) and selective catalytic reduction (SCR) systems; sulfur dioxide (SO₂) emissions are controlled by flue gas desulfurization (FGD) systems; mercury emissions are controlled by an activated carbon injection (ACI) system, which injects a sorbent such as activated carbon into the flue gas of each Affected Unit prior to its ESP, or by burning refined coal.

The Kincaid Affected Units were built in 1967 and 1968, have nominal capacities of 6634 and 6406 mmBtu/hour, and are served by a single stack. Opacity from the stack is monitored by a COMS. In addition to coal, these units fire natural gas during startup and for flame stabilization. These units are subject to numerous standards and limitations, which are specified in a CAAPP Permit (Application No. 95090078) (**Exhibit B**).² This permit had an Initial Effective Date of February 5, 2015, and an Expiration Date of February 5, 2020. Dynegy timely submitted a renewal permit application on April 30, 2019, and continues to operate Kincaid pursuant to the CAAPP

¹ After permit issuance, Dynegy submitted an application for minor modifications to the Baldwin CAAPP Permit. IEPA has not acted on the application. Dynegy complies with the proposed minor modifications, pursuant to 415 ILCS 5/39.5(14)(a)(vi). Those modifications are not reflected in the pdf of the permit attached as an exhibit, but are not related to the permit conditions I discuss in my testimony.

² After permit issuance, Dynegy submitted an application for minor modifications to the Baldwin CAAPP Permit. IEPA has not acted on the application. Dynegy complies with the proposed minor modifications, pursuant to 415 ILCS 5/39.5(14)(a)(vi). Those modifications are not reflected in the pdf of the permit attached as an exhibit, but are not related to the permit conditions I discuss in my testimony.

permit, as allowed by Condition 9.14 of the permit and Sections 39.5(5)(h) and (n) of the Illinois Environmental Protection Act (the Act). Dynegy currently plans to cease operation and retire the Kincaid Affected Units on or before July 17, 2027, in accordance with the federal CCR Rule.

Emissions from each Kincaid Affected Unit are controlled by numerous air pollution control equipment and measures, including: PM emissions are controlled by an ESP; NO_x emissions are controlled by OFA and SCR systems; SO₂ emissions are controlled by the use of Powder River Basin low sulfur sub-bituminous coal and a dry sorbent injection (DSI) FGD system, which injects a dry sorbent material such as sodium bicarbonate into the flue gas of each Affected Unit prior to its ESP; and mercury emissions are controlled by an ACI system which injects a sorbent such as activated carbon into the flue gas of each Affected Unit prior to its ESP.

The Newton Affected Unit was built in 1972, has a nominal capacity of 6,000 mmBtu/hour, and is served by a single stack. Opacity from the stack is monitored by a COMS. The unit has the capability to fire a combination of coal and fuel oil as its principal fuel. It also fires fuel oil as auxiliary fuel during startup and for flame stabilization. Periodically, small amounts of used oil may be fired with the coal. This unit is subject to numerous standards and limitations—including applicable requirements pursuant to the New Source Performance Standards (NSPS), 40 C.F.R. Part 60, Subpart D—which are specified in a CAAPP permit (Application No. 95090066) (**Exhibit C**).³ This permit had an Initial Effective Date of November 19, 2015, and an Expiration Date of November 19, 2020. Dynegy timely submitted a Renewal permit application on February 18, 2020, and continues to operate Newton pursuant to the CAAPP permit, as allowed by Condition

³ After permit issuance, Dynegy submitted an application for minor modifications to the Baldwin CAAPP Permit. IEPA has not acted on the application. Dynegy complies with the proposed minor modifications, pursuant to 415 ILCS 5/39.5(14)(a)(vi). Those modifications are not reflected in the pdf of the permit attached as an exhibit, but are not related to the permit conditions I discuss in my testimony.

9.14 of the permit and Sections 39.5(5)(h) and (n) of the Act. Dynegy currently plans to cease operations and retire the Newton Affected Unit on or before July 17, 2027, in accordance with the federal CCR Rule.

Emissions from the Newton Affected Unit are controlled by a numerous air pollution control equipment and measures, including: PM emissions are controlled by an ESP equipped with Flue Gas Conditioning (FGC) system, the FGC system injects SO₂ upstream of the ESP and is operated on an as-needed basis; SO₂ emissions are controlled by a DSI FGD system, which injects a dry sorbent material such as sodium bicarbonate into the flue gas prior to the ESP; NO_x emissions are controlled by low-NO_x burners and OFA systems; an ACI system controls mercury emissions by injecting a sorbent such as activated carbon into the flue gas prior to the ESP, and calcium bromide may be applied to the coal fired in the Affected Unit from time to time to further reduce mercury emissions.

B. Applicable Opacity Standards and SSM Exceptions.

The Baldwin, Kincaid and Newton CAAPP Permits specify applicable opacity standards under the Illinois regulations. The Baldwin and Kincaid Affected Units are generally subject to a 30% opacity limit, and the Newton Affected Unit is subject to the more stringent 20% opacity limit. Each permit provides an exception to the applicable opacity standards during SMB, granting Dynegy authorization to operate with opacity in excess of the applicable standards, subject to compliance with certain terms and conditions in the permit.

In addition to the state limitations, the Newton Affected Unit is also generally subject to a 20% opacity limit under the federal NSPS regulations. The permit includes the federal regulatory exception to the NSPS opacity limit for opacity during startup, shutdown, and malfunction.

1. Baldwin and Kincaid CAAPP Permit Opacity Requirements.

As specified in Condition 5.2.2(b) of the Baldwin and Kincaid CAAPP Permits, the

Baldwin and Kincaid Affected Units are subject to the 30% opacity limitation set forth at “35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) or 212.124” (emphasis added). Section 212.123 is titled “Visible Emissions Limitations for All Other Emission Units” and applies to units that are not subject to 35 IAC 212.122. Paragraph (a) sets forth the generally applicable 30 percent limitation, and paragraph (b) establishes an alternative limitation. Compliance with the 30% limitation in of Section 212.123(a) is “addressed by the average opacity calculated from six-minute periods of opacity measurements from the continuous opacity monitoring system” (Baldwin CAAPP Permit Cond. 7.1.12(a)).⁴

Section 212.124, in turn, is titled “Exceptions” and lays out a number of exceptions to the limitations set forth in Sections 212.122 and 212.123. There are four subsections, plus subparagraphs, setting forth the exceptions to the opacity limitations. The first of these is most pertinent to my testimony. Section 212.124(a) provides: “Sections 212.122 and 212.123 of this Subpart shall apply during times of startup, malfunction and breakdown except as provided in the operating permit granted in accordance with 35 Ill. Adm. Code 201.” Meaning that Section 212.123 (the section setting forth the applicable opacity limitations) does not apply to the Baldwin or Kincaid Affected Units during times of startup, malfunction and breakdown, to the extent provided by their CAAPP permits.

The SMB exceptions applicable to the Baldwin and Kincaid Affected Units are set forth in Conditions 7.1.3(b) and (c) of their CAAPP permits. These conditions refer to each Baldwin and Kincaid Affected Unit, respectively, as an “affected boiler.”

⁴ Condition 7.1.12(a) of the Kincaid CAAPP Permit is substantively identical; it simply uses the numeral “6” in place of “six.”

Condition 7.1.3(b)⁵ contains the exception from opacity standards (and certain emission standards) during startups. It states that “the Permittee is authorized to operate an affected boiler in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123) ... during startup. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262...” (emphasis added). It goes on to establish permit-specific terms that apply in order to qualify for the exception, including use of “reasonable efforts ... to minimize startup emissions, duration of individual startups and frequency of startups” (Cond. 7.1.3(b)(i)); conducting startups in accordance with “written procedures ... developed to minimize emissions from startups” including (as to Baldwin) “[u]se of auxiliary fuel burners to heat the boiler prior to initiating burning of coal,” (as to Kincaid) “[u]se of natural gas to heat the boiler prior to initiating burning of coal,” and (as to both) “timely energization of the ESP as soon as this may be safely accomplished without damage or risk to personnel or equipment” (Cond. 7.1.3(b)(ii)); and fulfilling rigorous “recordkeeping and reporting requirements” established in the permit (Cond. 7.1.3(b)(iii)). Finally, Condition 7.1.3(b)(iv) references 35 IAC 201.265, stating that authorization for “excess emissions” is not a shield, but a prima facie defense, to enforcement actions, “provided that the Permittee has fully complied with all terms and conditions connected with such authorization.”

Condition 7.1.3(c) contains the exception from opacity standards (and certain emission standards) during malfunctions and breakdowns. It states that

the Permittee is authorized to continue operation of an affected boiler in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123) ... in the event of a malfunction or breakdown of an affected boiler, including the coal crusher, the ash removal system, or the electrostatic precipitator. This authorization is provided pursuant to 35 IAC 201.149, 201.261, and 201.262,

⁵ Unless otherwise specified, citations to Conditions 7.1.3(b) and (c) in this paragraph and the next paragraph are to both the Baldwin and Kincaid CAAPP Permits.

as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment...

(Kincaid CAAPP Permit Cond. 7.1.3(c)) (emphasis added).⁶ It goes on to establish permit-specific terms that apply in order to qualify for the exception, including limiting the authorization to “continued operation as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment” and noting that it “does not extend to continue operation solely for the economic benefit of the Permittee” (Cond. 7.1.3(c)(i)); requiring that, “[u]pon the occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable reduce boiler load, repair the affected boiler, remove the affected boiler from service or undertake other action so that excess emissions cease” (Cond. 7.1.3(c)(ii)); requiring the Permittee to fulfill rigorous recordkeeping and reporting obligations (Cond. 7.1.3(c)(iii)); requiring that the Permittee comply with any “reasonable directives” from IEPA following notification of “malfunction or breakdown with excess emissions” pursuant to 35 IAC 201.263 (Cond. 7.1.3(c)(iv)); and requiring the Permittee to “minimize excess emissions during malfunction or breakdown” (Cond. 7.1.3(c)(v)).

2. *Newton CAAPP Permit Opacity Requirements.*

As specified in Condition 5.2.2(c) of the Newton CAAPP Permit, the Newton Affected Unit is subject to the 20% opacity limitation set forth at “35 IAC 212.122(a), except as allowed by 35 IAC 212.122(b) or 212.124” (emphasis added). Section 212.122 is titled “Visible Emissions Limitations for Certain Emission Units For Which Construction or Modification Commenced On or After April 14, 1972.” Paragraph (a) sets forth the generally applicable 20 percent limitation,

⁶ Condition 7.1.3(c) of the Baldwin CAAPP Permit is identical in relevant part, except that it refers to “the coal conditioner” rather than “the coal crusher.”

and paragraph (b) establishes an alternative limitation. Compliance with the 20% limitation in of Section 212.122(a) is “addressed by the average opacity calculated from six-minute periods of opacity measurements from the continuous opacity monitoring system” (Newton CAAPP Permit Cond. 7.1.12(a)). And, as described above, Section 212.124 sets forth exceptions to both Section 212.122 and Section 212.123.

The SMB exceptions to the Section 212.122 opacity limitations for the Newton Affected Unit are set forth in Conditions 7.1.3(b) and (c) of the Newton CAAPP Permit. These conditions largely mirror the corresponding conditions in the Baldwin and Kincaid CAAPP Permits for exceptions to the opacity limitations. Differences between these conditions are:

- they apply to different opacity limitations (Section 212.123 at Baldwin and Kincaid, and Section 212.122 at Newton);
- rather than requiring “[u]se of natural gas to heat the boiler prior to initiating burning of coal” during startups, like the Kincaid CAAPP Permit, Newton CAAPP Permit Condition 7.1.3(b)(ii)(A) requires “[u]se of auxiliary fuel burners to heat the boiler prior to initiating burning of coal,” like the Baldwin CAAPP Permit; and,
- Newton does not have coal crushers, and so coal crushers are not referenced in Condition 7.1.3(c) of the Newton CAAPP Permit.

In addition to being subject to the state opacity limitation, the Newton Affected Unit is also subject to an opacity limitation pursuant to NSPS, Subpart D. As summarized by Condition 7.1.4(a)(iii), “Opacity from the affected boiler shall not exceed 20 percent, as measured on a six minute average, except for one 6 minute period per hour of not more than 27 percent pursuant to NSPS, 40 CFR 60.42(a)(2).” Of note, the permit goes on to provide an exception to this limitation,

pursuant to 40 C.F.R. §§ 60.8(c) and 60.11(c), stating that the “limitations do not apply during startup, shutdown, and malfunction, as defined by 40 CFR 60.2,” though such exceedances “are still subject to recordkeeping and reporting requirements under the NSPS” (Cond. 7.1.4(iv)).

3. *Permit Shields.*

Condition 8.1 in the Baldwin, Kincaid and Newton CAAPP Permits provides that Dynegey has been granted a permit shield. Condition 8.1 then explains the legal effect of the permit shield.

This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date of the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA ... has determined that other requirements specifically identified are not applicable to this source...

(emphasis added). So long as Dynegey complies with the SMB permit authorizations discussed above, compliance with those permit conditions shall be deemed compliance with the law.

4. *Dynegey's Understanding of the State Opacity Limitations and Corresponding Exceptions.*

Dynegey understands the Baldwin, Kincaid, and Newton CAAPP Permits to provide conditional exceptions to the Illinois opacity limitations applicable to the Affected Units through the SMB Authorizations. The permits authorize operation in excess of the opacity limitations in Sections 212.123 and 212.122, provided that Dynegey complies with the enumerated “terms and conditions” in Conditions 7.1.3(b) and (c) for startups and for malfunctions and breakdowns, respectively. They further provide that compliance with these permit conditions “shall be deemed compliance with” Sections 212.123 and 212.122.

Dynegey understands that there remains a possibility that an enforcement action could be brought, challenging whether the company complied with the terms and conditions, and, therefore, qualified for the exception, but that compliance with these terms and conditions would constitute a prima facie defense to any such enforcement action. Simply put, the prima facie defense

provided by the permits and Section 201.265 provides a backstop to enforcement. Because operation in violation of (*i.e.*, in excess of) the limitations in Sections 212.123 and 212.122 was expressly “authorized” by the permits, Dynegy has never understood the permits as prohibiting such operation or opacity. And because compliance with the relevant permit conditions “shall be deemed compliance” with the underlying regulatory requirements, Dynegy has never believed that operating in excess of opacity standards, but in compliance with the SMB Authorizations, could still be considered “non-compliance” or “violations of law.” Condition 8.1 plainly compels the opposite conclusion.

In summary, Dynegy has understood (and based operating decisions on its understanding that) so long as Dynegy complied with the relevant permit terms, it was authorized to operate with opacity in excess of the opacity limitations in Sections 212.122 and 212.123, pursuant to the exception in Section 212.124(a), and that such operations would comply with the regulatory requirements.

C. Dynegy’s Proposal.

Dynegy proposes to codify an opacity limit during SMB events, utilizing an alternative averaging period, to address the 2015 SSM SIP Call; this is more stringent than the SMB exception currently provided to Newton, Baldwin, and Kincaid. Dynegy proposes this opacity limit only for the Affected Units and only in connection with the opacity limitations of Sections 212.122 and 212.123. Dynegy makes this proposal because it is infeasible for the Affected Units to comply with these limitations 100% of the time.

Under the proposal, when compliance cannot be demonstrated with Section 212.122 or 212.123 on a six-minute average basis during times of startup, malfunction or breakdown, Dynegy would have the option to demonstrate compliance with the State 20% or 30% limitation for the Newton Affected Unit or the Baldwin or Kincaid Affected Units, respectively, using a three-hour

averaging period (the Alternative Averaging Period). This would be accomplished for a given six-minute block period when the Alternative Averaging Period is needed by taking the average opacity measurements from the COMS for those six minutes and the preceding 174 minutes of data. This Alternative Averaging Period is modeled on each Affected Unit's compliance assurance monitoring (CAM) plan for the applicable state PM limitations (*see Exhibit A* at 84–86, Tables 7.1.13-1 & 7.1.13-2; *Exhibit B* at 96, Table 7.1.13a; *Exhibit C* at 83, Table 7.1.13), which utilize three-hour opacity data as an indicator of compliance with those PM limitations.

The proposal includes recordkeeping and reporting obligations and work practice requirements that are more stringent than required by existing Illinois regulations. And the proposal would not affect any additional permit-specific terms that IEPA established as a condition for utilizing the current SMB exceptions. The proposal would be codified as a new subsection to Section 212.124. And, adoption of this proposal would not require any change to the revisions proposed by IEPA's Proposed Rule.

1. Proposed Regulatory Revisions.

Section 212.124 Exceptions

d) During times of startup of coal-fired boiler 1 or 2 at the Baldwin Energy Complex, coal-fired boiler 1 or 2 at the Kincaid Power Station, or coal-fired boiler 1 at the Newton Power Station, or of malfunction or breakdown of these boilers or the air pollution control equipment serving these boilers, when average opacity exceeds 20 or 30 percent for a six-minute period, as applicable pursuant to Section 212.122(a) or 212.123(a) of this Subpart, compliance with Section 212.122(a) or 212.123(a) may alternatively be demonstrated for that six-minute period as follows.

1) Alternative Averaging Period.

Compliance for that six-minute period may be determined based on a three-hour average of opacity, utilizing opacity readings for those six minutes and the immediately preceding 174 minutes.

2) Recordkeeping and Reporting

- A) Any person relying on the Alternative Averaging Period in Section 212.124(d)(1) of this Subpart shall maintain records of such average opacity calculations and shall report such calculations to Illinois EPA as part of the next quarterly excess emissions report for the source.
- B) For periods of startup, such report shall include:
- 1) The date, time, and duration of the startup.
 - 2) A description of the startup.
 - 3) The reason(s) for the startup.
 - 4) An indication of whether or not written startup procedures were followed. If any written startup procedures were not followed, the report shall include any departures from established procedures and any reason the procedures could not be followed.
 - 5) A description of any actions taken to minimize the magnitude or duration of opacity that requires utilization of the Alternative Averaging Period in Section 212.124(d)(1) of this Subpart.
 - 6) An explanation whether similar incidents could be prevented in the future and, if so, a description of the actions taken or to be taken to prevent similar incidents in the future.
 - 7) Confirmation of fulfillment of the requirements of Section 212.124(d)(3) of this Subpart.
- C) For periods of malfunction and breakdown, such report shall include:
- 1) The date, time, duration (i.e., the length of time during which operation continued with opacity in excess of 20 or 30 percent, as applicable, on a six-minute average basis) until corrective actions were taken or the boiler was taken out of service.
 - 2) A description of the incident.
 - 3) Any corrective actions used to reduce the magnitude or duration of opacity that requires utilization of the Alternative Averaging Period in Section 212.124(d)(1) of this Subpart.
 - 4) Confirmation of fulfillment of the requirements of Sections 212.124(d)(2)(D) and (d)(3) of this Subpart.

D) Any person who causes or allows the continued operation of a coal-fired boiler during a malfunction or breakdown of the coal-fired boiler or related air pollution control equipment when such continued operation would require reliance on the Alternative Averaging Period in Section 212.124(d)(1) of this Subpart to demonstrate compliance with Section 212.122 or 212.123 of this Subpart, as applicable, shall immediately report such incident to the Agency by telephone, facsimile, electronic mail, or such other method as constitutes the fastest available alternative, except if otherwise provided in the operating permit. Thereafter, any such person shall comply with all reasonable directives of the Agency with respect to the incident.

3) Work Practices

Any person relying on the Alternative Averaging Period in Section 212.124(d)(1) of this Subpart must comply with the following Work Practices.

A) Operate the coal-fired boiler and related air pollution control equipment in a manner consistent with good engineering practice for minimizing opacity during such startup, malfunction or breakdown.

B) Use good engineering practices and best efforts to minimize the frequency and duration of operation in startup, malfunction and breakdown.

2. *Dynegy's Proposal is Narrowly Tailored.*

Dynegy's proposal is narrowly tailored to apply to only emission units and emission standards for which it cannot otherwise assure compliance 100% of the time during periods of startup, malfunction and breakdown. It does not apply to Dynegy's two operating gas-fired generating plants in Illinois. Moreover, it applies to only a subset of the units, and a subset of the emission standards, for which Dynegy currently has SMB Authorizations in the Baldwin, Kincaid, and Newton CAAPP Permits. The following table highlights the scope of current SMB Authorizations in these permits, with yellow highlighting denoting the units and applicable standards Dynegy's proposal addresses:

Plant	Emission Units / Categories of Units	Authorization Type (SMB or MB)	Opacity	PM (Incl. PWR)	SO ₂	CO	NO _x
Baldwin	Boilers 1 & 2	SMB	212.123	212.203	214.185	216.121	
	Coal Handling Equipment	MB	212.123	212.321(a) 212.322(a)			
	Coal Processing Equipment	MB	212.123	212.321(a) 212.322(a)			
	Fly Ash and Spray Dryer Absorber Ash Equipment	MB	212.123	212.321(a) 212.322(a)			
	Auxiliary Boiler	SMB	212.123	212.206		216.121	
Kincaid	Boilers 1 & 2	SMB	212.123	212.202		216.121	
	Coal Handling Equipment	MB	212.123	212.321(a)			
	Coal Processing Equipment	MB	212.123	212.321(a)			
	Fly Ash Handling Equipment	MB	212.123	212.321(a)			
Newton	Boiler 1	SMB	212.122	212.204		216.121	217.121(d)
	Coal Handling Equipment	MB	212.123				
	Fly Ash Handling Equipment	MB	212.123	212.321(a)			

Note: The Coal Handling Equipment, Coal Processing Equipment, Fly Ash and Spray Dryer Absorber Ash Equipment, and Fly Ash Handling Equipment categories identified on this table each consist of numerous emissions units at each respective plant.

The Affected Units cannot comply with the Sections 212.122 and 212.123 100% of the time during periods of startup, malfunction and breakdown. To be sure, the number of such events is quite low—far below 0.5% of the time. But Dynegy strives to comply all of the time, to the extent possible.

Some of these opacity events are caused by ESP malfunctions. ESPs are large, complex systems that place an electrical charge on particles, which are then collected on oppositely charged collector plates. These systems, like all others, may experience problems even with the most vigilant operating and maintenance measures and procedures. Unexpected issues that can occur

that may result in lower control efficiency and increased opacity include loss of adequate power to collector plates, inability to rap and clean the collector plates sufficiently, and broken electrodes or related equipment. The risk of exceedances occurs even at the Affected Units that are controlled by both ESPs and baghouses.

3. *Dynegy's Proposal Would Impose Limits During Periods of Startup, Malfunction and Breakdown.*

Unlike the current regulations and permit terms, Dynegy's proposal would set a limit that would apply during periods of startup, malfunction and breakdown. In fact, the same numeric percentage limitation would apply as applies under Section 212.122 or 212.123, as applicable, but compliance with the limitation during SMB would be determine through the use of a longer averaging period.

4. *Dynegy's Proposal is More Stringent than Current Requirements and Will Not Result in Backsliding.*

Dynegy's proposal is more stringent than the authorizations currently in place. It would impose limitations during periods of SMB. It would also codify work practices and recordkeeping and reporting requirements. And it would not affect any permit-specific terms and conditions currently in the Baldwin, Kincaid, or Newton CAAPP Permits, which serve as conditions to relying on the authorizations. As a result, Dynegy's proposal would result in no greater opacity from the Affected Units (in terms of the percentage opacity, or duration of excess opacity) than what is currently authorized by the CAAPP permits.

Dynegy's proposal would not result in backsliding with respect to any National Ambient Air Quality Standard (NAAQS). Opacity is an indicator for particulate emissions. Illinois currently has no area in non-attainment with any of the NAAQS for particulate matter emissions. And, these plants are not in maintenance areas for those NAAQS. Because Dynegy's proposal is more stringent than current requirements, it will not authorize any more opacity than currently

authorized. As such, it will not result in any increase in emissions of particulate matter.

Notably, Dynegy's proposed Alternative Averaging Period is modeled on each Affected Units' CAM plan for the applicable state PM limitations, which utilize three-hour opacity data as an indicator of compliance with those PM limitations. Newton's CAM plan for the applicable state particulate emission standard (35 IAC 212.204) uses an indicator of 20% opacity, on a three-hour rolling average basis. The CAM plan, which is incorporated into the Newton CAAPP Permit in Table 7.1.13, states, "The opacity indicator level has been established at a level that provides reasonable assurance that particulate matter emissions are in compliance when opacity is equal to or less than the indicator level" (**Exhibit C** at 83, Table 7.1.13). The same rationale is provided in the Baldwin CAM plans (insert cite be exhibit/page to Tables 7.1.13-1 and -2 of the Baldwin CAAPP Permit) for the applicable state particulate matter standard (35 IAC 212.203), which specify 30% opacity indicators, on a three-hour rolling average basis.⁷ The same is true for the Kincaid CAM plan (**Exhibit B** at 96, Table 7.1.13a) for the applicable state particulate matter standard (35 IAC 212.202), which specifies an indicator of 30% opacity, on a three-hour rolling average basis.

5. *Dynegy's Proposal Is Consistent with U.S. EPA's Proposed Rule and is Approvable.*

Dynegy carefully crafted its proposal to satisfy U.S. EPA's guidance, as set forth in the SSM SIP Call (80 Fed. Reg. 33840). Dynegy believes it can and should be approved into the Illinois SIP. Dynegy's proposal is, in fact, more narrowly tailored than the SSM exception that applies to the 20% opacity limitation under the federal NSPS regulations applicable to Newton, as outlined above.

⁷ For Baldwin boiler 2, opacity is a secondary indicator, which applies when the primary indicator (a PM continuous emission monitoring system) is inoperable.

VI. Conclusion

Dynegy's proposal would provide narrowly tailored relief to allow Dynegy to continue compliant operation of the Affected Units, recognizing that it is not possible to avoid opacity exceedances 100% of the time during periods of SMB. The proposal includes limits that would apply during periods of SMB, and so is more stringent than the SMB provisions in the Newton, Baldwin, and Kincaid CAAPP Permits. It would not result in any greater opacity—or particulate emissions—than currently authorized. As such, it will not result in backsliding. Dynegy believes the proposal could and should be approved into the Illinois SIP. We ask that the Board give this proposal a chance, so that Dynegy can continue operating these units in compliance with its state opacity requirements and continue to provide reliable power to the grid.

CH2:26774159.6

EXHIBIT A



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

BRUCE RAUNER, GOVERNOR

ALEC MESSINA, DIRECTOR

217/785-1705

"REVISED"

CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE

Dynegy Midwest Generation, LLC
Attn: Phil Morris
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

Application No.: 95090026

I.D. No.: 157851AAA

Operation of: Baldwin Energy Complex

Original Date Received: September 6, 1995

Original Date Issued: September 29, 2005

Initial Effective Date: June 21, 2018

Expiration Date¹: June 21, 2023

Source Location: 10901 Baldwin Road, Baldwin, IL 62217, Randolph County

Responsible Official: John Cooley, Managing Director, Plant Operations - Baldwin Energy Complex

The above-referenced permit was originally issued to the Permittee to OPERATE an electrical power generation station, pursuant to the corresponding permit application, on September 29, 2005. As a result of an automatic stay of the permit during the pendency of an administrative permit appeal, the CAAPP permit became effective on the date shown above.

Type of Permit Action: Significant Modification

Date Received: February 27, 2018

Date Issued: June 21, 2018

Permit Authorization:

This permit revision is hereby granted to the above-designated Permittee for operation of the above-referenced source. This permit is subject to the conditions contained herein.

In accordance with Section 39.5(14)(c) of the Illinois Environmental Protection Act, this permit action addresses certain changes to Permit Conditions, as discussed in the accompanying Statement of Basis, resulting from the settlement resolution of an administrative permit appeal filed in 2005 before the Pollution Control Board.² These revisions involve negotiated changes to the issued CAAPP permit that were significant in nature and could not be appropriately addressed as part of the permit reopening, a minor modification or an administrative amendment. The procedures for issuance of this permit action are the same as were applicable for initial permit issuance. 415 ILCS 5/39.5(14)(c)(iii).

¹ Except as addressed in Condition 8.7 of this permit.

² This permit revises the initial CAAPP permit for the source, which was placed into effect on the same date as a consequence of the Pollution Control Board order granting a Joint Motion to Partially Lift Stay of CAAPP Permit and Request Remand of Permit to Respondent in the pending administrative appeal. The significant modification undertaken in this action revises the CAAPP permit to facilitate a dismissal of the appeal.

Please note that in conjunction with this permit action, the CAAPP permit has been revised through other modification procedures under the CAAPP, each with different legal authority, procedures and standards for issuance. Because of the interplay of the various revisions, a single permit document has been prepared for purposes of public participation and USEPA review. Separate permit authorizations are provided for these other revisions to the CAAPP permit, which were made in accordance with the applicable procedures set forth in Sections 39.5(13), (14) and (15).

If you have any questions concerning this permit, please contact the CAAPP Unit at 217/785-1705.

Raymond E. Pilapil
Manager, Permit Section
Bureau of Air

REP:MTR:DLR:jlj

cc: Illinois EPA, FOS, Region 3
USEPA



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BRUCE RAUNER, GOVERNOR

ALEC MESSINA, DIRECTOR

217/785-1705

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CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

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The above-referenced permit was originally issued to the Permittee to OPERATE an electrical power generation station, pursuant to the corresponding permit application, on September 29, 2005. As a result of an automatic stay of the permit during the pendency of an administrative permit appeal, the CAAPP permit became effective on the date shown above.

Type of Permit Action: Minor Modification

Date Application Received: February 27, 2018

Date Issued: June 21, 2018

Permit Authorization:

This permit revision is hereby granted to the above-designated Permittee for operation of the above-referenced source. This permit is subject to the conditions contained herein.

In accordance with Section 39.5(14)(a) of the Illinois Environmental Protection Act, this permit action addresses certain minor changes to Permit Conditions, as identified in an attachment to the accompanying Statement of Basis, resulting from the settlement resolution of an administrative permit appeal filed in 2005 before the Pollution Control Board.² These revisions involve negotiated changes to the issued CAAPP permit that were not significant in nature and could not be appropriately addressed as part of permit reopening or administrative amendment.

¹ Except as addressed in Condition 8.7 of this permit.

² This permit revises the initial CAAPP permit for the source, which was placed into effect on the same date as a consequence of the Pollution Control Board order granting a Joint Motion to Partially Lift Stay of CAAPP Permit and Request Remand of Permit to Respondent in the pending administrative appeal. The minor modification undertaken in this action revises the CAAPP permit to facilitate a dismissal of the permit appeal.

Please note that in conjunction with this permit action, the CAAPP permit has been revised through other modification procedures under the CAAPP, each with different legal authority, procedures and standards for issuance. Because of the interplay of the various revisions, a single permit document has been prepared for purposes of public participation and USEPA review. Separate permit authorizations are provided for these other revisions to the CAAPP permit, which were made in accordance with the applicable procedures set forth in Sections 39.5(13), (14) and (15).

If you have any questions concerning this permit, please contact the CAAPP Unit at 217/785-1705.

Raymond E. Pilapil
Manager, Permit Section
Bureau of Air

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CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE

Dynegy Midwest Generation, LLC
Attn: Phil Morris
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

Application No.: 95090026

I.D. No.: 157851AAA

Operation of: Baldwin Energy Complex

Original Date Received: September 6, 1995

Original Date Issued: September 29, 2005

Initial Effective Date: June 21, 2018

Expiration Date¹: June 21, 2023

Source Location: 10901 Baldwin Road, Baldwin, IL 62217, Randolph County

Responsible Official: John Cooley, Managing Director, Plant Operations - Baldwin Energy Complex

The above-referenced permit was originally issued to the Permittee to OPERATE an electrical power generation station, pursuant to the corresponding permit application, on September 29, 2005. As a result of an automatic stay of the permit during the pendency of an administrative permit appeal, the CAAPP permit became effective on the date shown above.

Type of Permit Action: Administrative Amendment

Date Application Received: February 27, 2018

Date Issued: June 21, 2018

Permit Authorization:

This permit revision is hereby granted to the above-designated Permittee for operation of the above-referenced source. This permit is subject to the conditions contained herein.

In accordance with Section 39.5(13) of the Illinois Environmental Protection Act, this permit action addresses certain administrative changes to Permit Conditions, as identified in an attachment to the accompanying Statement of Basis, resulting from the settlement resolution of an administrative permit appeal filed in 2005 before the Pollution Control Board.² These changes involve typographical corrections and minor administrative changes. The revised federal Acid Rain Program Permit, which was issued by the Illinois EPA for this source in another permit action, has also been included in this revised CAAPP permit as Attachment 5.

¹ Except as addressed in Condition 8.7 of this permit.

² This permit revises the initial CAAPP permit for the source, which was placed into effect on the same date as a consequence of the Pollution Control Board order granting a Joint Motion to Partially Lift Stay of CAAPP Permit and Request Remand of Permit to Respondent in the pending administrative appeal. The administrative amendment undertaken in this action revises the CAAPP permit to facilitate a dismissal of the appeal.

Please note that in conjunction with this permit action, the CAAPP permit has been revised through other modification procedures under the CAAPP, each with different legal authority, procedures and standards for issuance. Because of the interplay of the various revisions, a single permit document has been prepared for purposes of public participation and USEPA review. Separate permit authorizations are provided for these other revisions to the CAAPP permit, which were made in accordance with the applicable procedures set forth in Sections 39.5(14) and (15).

If you have any questions concerning this permit, please contact the CAAPP Unit at 217/785-1705.

Raymond E. Pilapil
Manager, Permit Section
Bureau of Air

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ALEC MESSINA, DIRECTOR

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CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE

Dynegy Midwest Generation, LLC
Attn: Phil Morris
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

Application No.: 95090026

I.D. No.: 157851AAA

Operation of: Baldwin Energy Complex

Original Date Received: September 6, 1995

Original Date Issued: September 29, 2005

Initial Effective Date: June 21, 2018

Expiration Date¹: June 21, 2023

Source Location: 10901 Baldwin Road, Baldwin, IL 62217, Randolph County

Responsible Official: John Cooley, Managing Director, Plant Operations - Baldwin Energy Complex

The above-referenced permit was originally issued to the Permittee to OPERATE an electrical power generation station, pursuant to the corresponding permit application, on September 29, 2005. As a result of an automatic stay of the permit during the pendency of an administrative permit appeal, the CAAPP permit became effective on the date shown above.

Type of Permit Action: Reopening for Cause

Date Issued: June 21, 2018

Permit Authorization:

This permit revision is hereby granted to the above-designated Permittee for operation of the above-referenced source. This permit is subject to the conditions contained herein.

In accordance with Section 39.5(15)(a)(i) of the Illinois Environmental Protection Act, this permit action addresses certain changes to Permit Conditions, as described in the accompanying Statement of Basis, so as to include Clean Air Act (CAA) requirements that have become applicable to the source since September 29, 2005.² Affected permit conditions largely reflect the addition of new or revised text to the permit; however, some conditions will also reflect deleted text that has been displaced or made obsolete by newly applicable requirements. The procedures for

¹ Except as addressed in Condition 8.7 of this permit.

² This permit revises the initial CAAPP permit for the source, which was placed into effect on the same date as a consequence of the Pollution Control Board order granting a Joint Motion to Partially Lift Stay of CAAPP Permit and Request Remand of Permit to Respondent in the pending administrative appeal. The permit reopening undertaken in this action revises the permit to assure that, together with the parallel permit actions taken to resolve the appeal, the Permittee is provided a comprehensive, up-to-date permit.

issuance of this permit action are the same as were applicable for initial permit issuance. 415 ILCS 5/39.5(15)(c).

The federal Acid Rain Permit issued to Baldwin Energy Complex by the Illinois EPA has been revised at the request of the source and is incorporated into this CAAPP permit (See Attachment 5).

If you have any questions concerning this permit, please contact the CAAPP Unit at 217/785-1705.

Raymond E. Pilapil
Manager, Permit Section
Bureau of Air

REP:MTR:DLR:jl

cc: Illinois EPA, FOS, Region 3
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I.D. No: 157851AAA

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1.0 INTRODUCTION

1.1 Source Identification

Baldwin Energy Complex
10901 Baldwin Road
Baldwin, Illinois 62217
618/785-3212

I.D. No.: 157851AAA
Acid Rain Permit ORIS Code No.: 889

Standard Industrial Classification: 4911, Electrical Services

1.2 Owner/Parent Company

Dynegy Midwest Generation, LLC
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

1.3 Operator

Dynegy Midwest Generation, LLC
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

Phil Morris
618/343-7794

1.4 General Source Description

Dynegy Midwest Generation, LLC operates three coal-fired boilers and associated steam turbine generators at the Baldwin Energy Complex to produce electricity.

1.5 Title I Conditions

This CAAPP permit contains certain conditions for units at this source that address the applicability of permitting programs for the construction and modification of sources, which programs were established pursuant to Title I of the Clean Air Act (CAA) and regulations thereunder. These programs include 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification (MSSCAM), and are implemented by the Illinois EPA pursuant to Sections 9, 9.1, 39(a) and 39.5(7)(a) of Illinois' Environmental Protection Act (Act). These "Title I conditions" within this permit are specifically designated as "T1," if they reflect requirements established in construction permits issued for this source, "T1R" if they revise requirements established in such construction permits, or "T1N" if they are newly established in this CAAPP permit. These conditions continue in effect, notwithstanding the expiration date specified on the first page of this permit, as their authority derives from Titles I and V of the CAA, as well as Titles II and X of the Act. (See also Condition 8.7.)

2.0 LIST OF ABBREVIATIONS AND ACRONYMS USED IN THIS PERMIT

acfm	actual cubic feet per minute
ACI	Activated Carbon Injection
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAIR	Clean Air Interstate Rule
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CMS	Continuous Monitoring System(s)
CO	Carbon Monoxide
CSAPR	Cross-State Air Pollution Rule
dcfm	dry cubic feet per minute
DSI	Dry Sorbent Injection
EGU	Electrical Generating Unit(s)
ESP	Electrostatic Precipitator
°F	degrees Fahrenheit
FGD	Flue Gas Desulfurization System
ft	foot
ft ³	cubic foot
Gal	Gallon
GWh	Gigawatt-hour (1.0E+3 MWh)
HAP	Hazardous Air Pollutant
HP	horsepower
hr	Hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
°K	degrees Kelvin
Kg	kilogram
kW	Kilowatts
lb	Pound
LEE	Low Emitting EGU
LNB	Low NOx Burners
m	meter
MACT	Maximum Achievable Control Technology
MATS	Mercury and Air Toxics Standards - 40 CFR 63 Subpart UUUUU
mmBtu	million British thermal units
MW	Megawatts
MWh	Megawatt hour
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOx	Nitrogen Oxides
NSPS	New Source Performance Standards (40 CFR Part 60)
NSSA	New Source Set-Aside
OFA	Over-Fire Air
OM	organic material

ORIS	Office of Regulatory Information System
PM	Particulate Matter
PM CPMS	Particulate Matter Continuous Parametric Monitoring System
PM _{2.5}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration (40 CFR 52.21)
psia	pounds per square inch absolute
RATA	Relative Accuracy Test Audit
RICE	Reciprocating Internal Combustion Engine
RMP	Risk Management Plan
SCR	Selective Catalytic Reduction
SDA	Spray Dryer Absorber System
SO ₂	Sulfur Dioxide
SOFA	Separated Over-Fire Air
T	Ton (2000 pounds)
TBtu	1.0E+12 British thermal units
TR	Transport Rule
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOC or VOM	volatile organic compounds or volatile organic material
VOL	volatile organic liquid
yr	year

3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

- 3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

None

- 3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

Anhydrous Ammonia Tank (with flare)
Lime Storage Silos with Bin Vent Filters
Activated Carbon Silos with Bin Vent Filters
Sulfuric Acid Tank
Ammonia Solution Tanks

- 3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1,118 kW (150 and 1,500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a)(16)].

- 3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

Note: The heating of a coal-fired boiler with auxiliary fuel during maintenance and repair of the boiler is considered an insignificant activity under 35 IAC 201.210(b)(29) and is generally not addressed by the unit-specific conditions of this permit for coal-fired boilers. Notwithstanding such status as an insignificant activity, the opacity of the exhaust from each coal-fired boiler is at all times subject to the applicable opacity

standard and the unit-specific conditions of this permit for boilers that relates to opacity are applicable during maintenance and repair of a boiler.

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182.
- 3.2.2 For each particulate matter process emission unit, other than units excluded by 35 IAC 212.323 or 212.681, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.3 Addition of Insignificant Activities

- 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).
- 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) or 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.
- 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

3.4 Emergency Engines

3.4.1 Description

The plant has five diesel-fired engines for emergency equipment (the affected engines). Additional details for these engines is as follows:

Engine Name	Year Installed	HP	Ignition Type
Baldwin Boiler #1 Emergency Engine	1969	485	Compression
Baldwin Boiler #2 Emergency Engine	1972	550	Compression
Baldwin Boiler #3 Emergency Engine	1972	550	Compression
Emergency Fire Pump Crib House	1994	231	Compression
Emergency Fire Pump Flume	2000	420	Compression

Note: The description in Condition 3.4.1 is for informational purposes only and implies no limits or constraints.

3.4.2 Applicable Federal Emission Standards

- a. The affected engine for Baldwin Boiler #1, the Crib House Fire Pump, and the Flume Fire Pump are subject to the federal NESHAP for Reciprocating Internal Combustion Engines, 40 CFR 63 Subpart ZZZZ because these three existing engines are less than 500 HP. The Permittee must comply with applicable requirements of this NESHAP, if any, and related requirements of the General Provisions of the NESHAP, 40 CFR 63 Subpart A, if any.

3.4.3 Applicable State Emission Standards

- a. The standard that addresses the opacity of the emission of smoke or other particulate matter from the affected engines is set forth in Condition 5.2.2(b), except as provided by 35 IAC 212.124(a).
- b.
 - i. The emission of SO₂ into the atmosphere from each affected engine shall not exceed 2,000 ppm pursuant to 35 IAC 214.301.
 - ii. Pursuant to 35 IAC 214.305, the sulfur content of all distillate fuel oil used by the affected engines shall not exceed 15 ppm.

3.4.4 Non-Applicability Provisions

- a. The affected engines are not subject to the requirements of the federal Acid Rain Program because they are not utility units. (Refer to 40 CFR 72.2 and 72.6.) Accordingly, electricity generated by the affected engines may not be sold to the power grid on a commercial basis.
- b. The affected engines are not subject to the NSPS for Compression Ignition Reciprocating Internal Combustion Engines (CI RICE), 40 CFR 60 Subpart IIII, because these engines were manufactured and installed before the applicability date of this NSPS (January 1, 2009).

- c. Pursuant to 40 CFR 63.6590(b)(3)(iii), the affected engine for Baldwin Boiler #2 and Baldwin Boiler #3 do not have to meet the requirements of 40 CFR Part 63 Subpart A or Subpart ZZZZ, including initial notification requirements, because the engines are existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that do not operate and are not contractually obligated to be available for an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3, or for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- d. The affected engines are not subject to the requirements of 35 IAC Part 212 Subpart L because a process weight rate cannot be set, due to the nature of such unit, so that these rules cannot reasonably be applied, pursuant to 35 IAC 212.323.

3.4.5 Work Practice and Operational Limitations

- a. For each affected engine, the Permittee shall operate and maintain a non-resettable hour meter, pursuant to the NESHAP, 40 CFR 63.6625(f), for the three affected engines which are less than 500 HP and Section 39.5(7)(a) of the Act for the two affected engines which are greater than 500 HP.
- b. The affected engines shall not be operated for any purpose other than emergency operation and maintenance and operational testing, as follows, pursuant to the NESHAP, 40 CFR 63.6640(f), for the three affected engines which are less than 500 HP and Section 39.5(7)(a) of the Act for the two affected engines which are greater than 500 HP:
 - i. Operation of each affected engine for maintenance checks and readiness testing shall be limited to 100 hours per calendar year.
 - ii. Each affected engine may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted toward the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for the source to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situation for 50 hours per year is prohibited.
- c. Pursuant to the NESHAP, 40 CFR 63.6625(e) and Item 9 of Table 6 to NESHAP 40 CFR 63 Subpart ZZZZ, for the three affected engines which are subject to substantive requirements of the NESHAP, the Permittee shall comply with the following work practice requirements:

- i. Operate and maintain the engines according to the manufacturer's emission-related operation and maintenance instructions, or
 - ii. Develop and follow the Permittee's own maintenance plan which must to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practices for minimizing emissions.
- d. Pursuant to 40 CFR 63.6602 and Item 1 of Table 2c to 40 CFR 63 Subpart ZZZZ, for the three affected engines subject to substantive requirements of the NESHAP, the Permittee shall comply with the following work practices:
- i. Change the engine oil every 500 hours of operation or annually, whichever comes first.*
 - * The Permittee has the option to utilize an oil analysis program as described in 40 CFR 63.6625(j) in order to extend the specified oil change requirement.
 - ii. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.
 - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

3.4.6 Recordkeeping Requirements

- a. For the three affected engines that are less than 500 HP, the Permittee shall fulfill applicable recordkeeping requirements of the NESHAP described in 40 CFR 63.6655(f).
- b. Pursuant to Section 39.5(7)(b) and (d) of the Act, for each affected engine, the Permittee shall maintain the following records:
 - i. Maintenance and repair records, listing each activity performed with date.
 - ii. Records of the operating hours of the affected engine (engine-hours/month and engine-hours/calendar year) with date, time, duration, and purpose (i.e., exercise or emergency or maintenance need).
- c. Pursuant to 35 IAC 214.305, the Permittee shall maintain records demonstrating that the fuel oil used by the affected engines complies with the requirements of Condition 3.4.3(b)(ii), such as records from the fuel supplier indicating the sulfur content.

3.4.7 Reporting Requirements

- a. For the three affected engines that are less than 500 HP, the Permittee shall fulfill applicable reporting requirements of the NESHAP, 40 CFR 63.6650.
- b. Pursuant to Section 39.5(7)(b) and (e) of the Act, if there is a deviation from the permit requirements for an affected engine, the Permittee shall report the deviation with the periodic compliance report for the coal-fired boiler.

3.5 Requirements for the Flare System for Ammonia Storage and Handling

- a. The Permittee shall comply with the following requirements for the flare system for the ammonia storage and handling facility: [T1]
 - i. The Permittee shall maintain the flare system in good working order.
 - ii. Propane or other gaseous fuel shall be the only fuels used for the pilot burner on the flare.
 - iii. Annual consumption of fuel by the flare shall not exceed 25,000 gallons per year.

Note: These requirements were established in the Construction Permit for the ammonia storage and handling facility, Permit 98120065, which was issued to the developer of this facility, Koch Fertilizer Storage and Terminal Company. These requirements were restated in the state operating permit for this facility issued to Dynegy, Permit 02020084, when Dynegy took ownership of this facility in 2001.

- b. Pursuant to 39.5(7)(b) of the Act, the Permittee shall keep the following records regarding the ammonia storage and handling facility:
 - i. Records for the consumption of fuel by the pilot burner on the flare system for the ammonia storage facility, gallons per calendar year.
 - ii. Records of any emergency pressure relief or pump seal failure, with the amount of ammonia burned by the flare with the date and description of activity, including estimated flare emissions during the event.
 - iii. Records of any releases of ammonia directly to the atmosphere, including date, time, description and estimated amount of ammonia released.
 - iv. Records of any repairs or maintenance to the ammonia storage and handling facility, with the date and description of activity, including the amount of blowdown of ammonia to the flare.

4.0 EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Emission Control Equipment/Measures	Ref.*
Insignificant Activities			3.0
Boiler 1 B1	Coal-Fired Boiler	OFA, SCR, ESP, ACI, FGD and Baghouses	7.1
Boiler 2 B2	Coal-Fired Boiler	OFA, SCR, ESP, ACI, FGD and Baghouses	
Boiler 3 B3	Coal-Fired Boiler	LNB, SOFA, ESP, ACI, FGD, and Baghouses	
Coal Handling Equipment	Fuel Receiving, Storage and Transfer Operations	Dust Collection Devices, Enclosures and Covers, and Dust Suppression	7.2
Coal Processing Equipment	Coal Conditioning operations	Enclosures and Covers, Dust Suppression and Dust Collection Device	7.3
Fly Ash and Spray Dryer Absorber Ash Equipment	Transfer Systems, Storage and Loadout Operations	Enclosures and Dust Collection Devices	7.4
Auxiliary Boiler	Distillate Oil Fired Boiler	None	7.5
Tank	Gasoline Storage Tank with Submerged Loading Pipe	None	7.6
Note: The information and descriptions contained in this table are for informational purposes only and imply no limits or constraints.			

* Reference to the Unit Specific Conditions in Section 7 or Insignificant Activities in Section 3 of this permit.

5.0 OVERALL SOURCE CONDITIONS

5.1 Applicability of Clean Air Act Permit Program (CAAPP)

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of SO₂, CO, NO_x, VOM, PM and HAP emissions.

5.1.2 This permit is issued based on the source requiring a CAAPP permit as an "affected source" for the purposes of Acid Deposition Control, Title IV of the Clean Air Act.

5.1.3 The source is considered a single source with the following entities:

- a. CyClean and M45-PC Fuel Additive Facilities - Source Name
RC201, LLC - Owner
Tinnuum Services, LLC - Operator/Permittee
ID: 157005AAD
Permit: 14100027
Located at 10901 Baldwin Road in Baldwin, IL

5.2 Applicable Regulations

5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.

5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability. Appropriate compliance procedures addressing these regulations are set forth for specific emission units in Section 7 of this permit:

- a. i. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith (i.e., overhead) at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
- ii. The Permittee shall conduct observations at the property line of the source for visible emissions of fugitive particulate matter from the source to address compliance with 35 IAC 212.301, upon request by the Illinois EPA, as follows: For this purpose, daily observations shall be conducted for a week for particular area(s) of concern at the source, as specified in the request. Observations shall begin either within one day or three days of receipt of a written request from the Illinois EPA, depending, respectively, upon whether observations will be conducted by employees of the Permittee or a third-party observer hired by the Permittee to conduct observations on its behalf. The Permittee shall keep records for these observations, including identity of

the observer, the date and time of observations, the location(s) from which observations were made, and duration of any fugitive emissions event(s).

- b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) or 212.124.

5.2.3 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, including the following:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be appropriately certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.4 Risk Management Plan (RMP)

- a. This stationary source, as defined in 40 CFR 68.3, is subject to 40 CFR Part 68, the federal regulations for Chemical Accident Prevention. This condition is imposed in this permit pursuant to 40 CFR 68.215(a)(1).
- b. The Permittee shall revise and update the RMP submitted pursuant to 40 CFR 68.150, as specified in 40 CFR 68.190.

5.2.5 Episode Action Plan

- a. Pursuant to 35 IAC 244.141, the Permittee shall have on file with the Illinois EPA an approved Episode Action Plan for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The Episode Action Plan shall contain the information specified in 35 IAC 244.144.
- b. Pursuant to 415 ILCS 5/39.5(7)(a), the Episode Action Plan, as submitted by the Permittee on November 20, 2017, is incorporated herein by reference. Any revision to the plan submitted to Illinois EPA while this permit is in effect is automatically incorporated by reference, provided the revision is not expressly disapproved, in writing, by the Illinois EPA within 30 days of receipt of the revision. Upon

such automatic incorporation, the revised plan replaces the version of the plan previously incorporated by reference.

- c. The plan incorporated by reference into this permit constitutes the approved Episode Action Plan required by 35 IAC 244.141, addressing the actions that will be implemented to reduce SO₂, PM₁₀, NO₂, CO and VOM emissions from various emissions units at the source in the event of a yellow alert, red alert or emergency issued under 35 IAC 244.161 through 244.165.
- d. Pursuant to 35 IAC 244.169, or as may otherwise be required under 35 IAC 244, Appendix D, the Permittee shall immediately implement the appropriate steps described in the approved Episode Action Plan upon receiving notice from the Illinois EPA.
- e. Pursuant to 35 IAC 244.143(d), if an operational change occurs at the source which invalidates the approved Episode Action Plan, a revised Episode Action Plan shall be submitted to the Illinois EPA for review and approval within 30 days of the change.
- f. Pursuant to Section 35 IAC 244.145(b), in the event that the Illinois EPA notifies the Permittee of a deficiency with any Episode Action Plan submitted pursuant to 35 IAC Part 244, the Permittee shall be required to revise and resubmit the Episode Action Plan within 30 days of receipt of notification to address the deficiency.
- g. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall keep a copy of the approved Episode Action Plan along with a record of activities completed according to the Episode Action Plan.

5.2.6 Intentionally Blank

5.2.7 Future Emission Standards

- a. Should this source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC Subtitle B after the date issued of this permit, the Permittee shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance or otherwise demonstrate initial compliance as provided by such regulation. Following the submittal of such a compliance certification or initial compliance demonstration, the Permittee shall address the applicable requirements of such regulation as part of the annual compliance certification required by Condition 9.8.

Note: This permit may also have to be revised or reopened to address such newly applicable regulations, as provided by Section 39.5(15)(a) of the Act. (See Condition 9.12.2.)

- b. This permit and the terms and conditions herein do not affect the Permittee's past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA. Further, neither the issuance of this permit nor any of the terms or conditions of the permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.

5.2.8 Control Measures Record

- a.
 - i. The Control Measures Record, as submitted by the Permittee on March 30, 2018, is incorporated herein by reference and constitutes the Control Measures Record required by Conditions 7.2.9(b), 7.3.9(b) and 7.4.9(b).
 - ii. Any revised version of the Control Measures Record prepared by the Permittee and submitted to Illinois EPA while this permit term is in effect is automatically incorporated by reference into this permit, except as provided in 5.2.8(a)(iii). Upon such automatic incorporation, the revised plan replaces the version of the plan previously incorporated by reference.
 - iii. For any revisions to the Control Measures Record that relate to Coal Unloading by Railcar, Belt Discharge Telescoping Spouts, Coal Storage Piles or Dry Ash Loadout, the Permittee shall submit an appropriate permit application to incorporate by reference such revisions into the permit.
 - iv. In the event that within 30 days of receipt of a revised Control Measures Record the Illinois EPA notifies the Permittee in writing of any deficiency with the revision, then, within 30 days of such notice, the Permittee shall respond with relevant additional information or a further revision to the Control Measures Record.
- b. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep a copy of the Control Measures Record and any amendments or revisions to the Control Measures Record (as required by Conditions 7.2.9(b), 7.3.9(b) and 7.4.9(b)).

5.3 Intentionally Blank

5.4 Other Source-Wide and System-Wide Requirements

5.4.1 Vehicle Traffic for the CyClean and M45-PC Fuel Additive Facilities

- a. The fugitive particulate matter emissions from roadways at the source due to vehicles that handle additives for the CyClean and M45-PC Fuel Additive Facilities shall not exceed 1.1 tons/year of PM/PM₁₀ emissions. [T1]

Note: This requirement was established in the Construction Permit for these fuel additive facilities, Permit 13100030. These facilities are located at the Baldwin Energy Complex and function to apply additives to the coal used by this source, so are support facilities for this source. Accordingly, this requirement, which addresses certain emissions from roadways at the source, is also applicable to the Permittee.

- b. Pursuant to 39.5(7)(b) of the Act, the Permittee shall keep a record of the fugitive particulate matter emissions from roadways at the source due to vehicles that handle additives for the CyClean and M45-PC Fuel Additive Facilities, as PM and PM₁₀, in tons/year with supporting data and calculations.

5.5 Permitted Emissions for Purposes of Fees

- a. The annual emissions from the source solely for purposes of Condition 9.4, not considering insignificant activities as addressed by Section 3, shall not exceed the following. [Section 39.5(18)(a)(ii) of the Act. (State-Only Requirement).]

<i>Pollutant</i>	<i>Tons/Year</i>
Volatile Organic Material (VOM)	321
Sulfur Dioxide (SO ₂)	4214
Particulate Matter (PM)	201
Nitrogen Oxides (NO _x)	4000
HAP, not included in VOM or PM (HAP)	30
Total	8766

- b. The overall source emissions shall be determined by adding emissions of the above pollutants from all emission units (not including insignificant activities) on a calendar year basis. The Permittee shall maintain records of annual emissions for fee purposes. [Section 39.5(18)(a)(ii) of the Act. (State-Only Requirement).]

5.6 General Recordkeeping Requirements

5.6.1 Records for Emissions

The Permittee shall maintain records for the source to prepare its Annual Emission Report pursuant to 35 IAC 254.134.

5.6.2 Retention and Availability of Records

The Permittee shall comply with the following requirements with respect to retention and availability of records pursuant to Sections 4(b) and 39.5(7)(a), (b) and (e)(ii), (o)(v), and (p)(ii)(A) and (B) of the Act.

- a. All records required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be readily accessible to the

Permittee, the Illinois EPA and USEPA, and made available for inspection and copying by the Illinois EPA or USEPA upon request.

- b. In response to an Illinois EPA or USEPA request made during the course of an inspection of the source, the Permittee shall retrieve and provide paper copies, or as electronic media, any records required by this permit that are retained in an electronic format (e.g., computer). Such response shall be provided at the time of the inspection; however, if the Permittee believes that the volume and nature of the requested material would make this overly burdensome, material shall be provided no later than 10 days thereafter unless a later date is agreed upon by the Permittee, Illinois EPA, and/or the USEPA.
- c. Upon written request by the Illinois EPA for copies of records or reports required to be kept by this permit, the Permittee shall promptly submit a copy of such material to the Illinois EPA. For this purpose, material shall be submitted to the Illinois EPA within 30 days unless additional time is provided by the Illinois EPA or the Permittee believes that the volume and nature of requested material would make this overly burdensome, in which case, the Permittee shall respond within 30 days with the explanation and a schedule for submittal of the requested material. (See also Condition 9.12.4.)

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

- a. For emissions units that are addressed by the unit-specific conditions of this permit, the timing for reporting of deviations shall be in accordance with such conditions.
- b.
 - i. For other emissions units and activities at the source, the timing for reporting of deviations shall be in accordance with the provisions of relevant regulations if such provisions address timing of deviation reports.
 - ii. Otherwise, if the relevant regulations do not address timing of deviation reports, deviation reports shall be submitted within 30 days.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year,

as specified by 35 IAC Part 254. [Sections 4(b) and 39.5(7)(a), (b) and (f) of the Act]

5.8 Intentionally Blank

5.9 Implementation of Permit Upon Date of Initial Effectiveness

- a. If this revised permit becomes effective during the fourth quarter of a given year, any annual (identified by the permit as calendar year or otherwise) or semi-annual inspection or observation requirements, including the combustion evaluations for the coal-fired boilers and heating boiler, the opacity observations for the coal handling, coal processing and fly ash equipment and the submerged fill pipe inspection for the gasoline storage tank, need not be performed by the Permittee until the following year.
- b. If this revised permit becomes effective on or after the 45th day of a given quarter, any quarterly testing, inspection and observation requirements, including the PM and CO emission measurements based on the use of alternative fuel relative to standard fuel, need not be performed by the Permittee until the following quarter.
- c. If this revised permit becomes effective on or after the 15th day of a given month, any monthly inspection requirements, including the monthly and the twice monthly inspections of affected operations/processes for the coal handling, coal processing and fly ash equipment need not be performed by the Permittee until the following month.
- d. If this revised permit becomes effective on or after Wednesday of a given week, any weekly inspection requirements, including the weekly inspections for the fly ash loadout equipment, need not be performed by the Permittee until the following week.
- e. The inspection requirements set forth in Condition 7.2.8(d) need not be performed by the Permittee until on or after the 35th day after the effective date of this revised permit.
- f. The first quarterly report to be submitted pursuant to Condition 7.1.10-2(a) must be submitted as follows. Thereafter, each subsequent quarterly report must be submitted as specified in Condition 7.1.10-2(a)(iii).
 - i. If this revised permit becomes effective before the 45th day of a calendar quarter, the report must be submitted within 60 days after the end of that quarter and address the period from the effective date of this permit through the end of that quarter.
 - ii. If this revised permit becomes effective on or after the 45th day of a calendar quarter, the report must be submitted within 60 days after the end of the first complete quarter in which this permit is effective and address the period from the effective date of this permit through the end of the first complete calendar quarter in which this permit is effective.

6.0 CONDITIONS FOR EMISSION CONTROL AND OTHER PROGRAMS

6.1 Intentionally Blank

6.2 Acid Rain Program

6.2.1 Applicability

Under Title IV of the CAA, Acid Deposition Control, this source is an affected source and the following emission units at the source are affected units for acid deposition:

Boilers 1, 2, and 3

Note: Title IV of the CAA, and regulations promulgated thereunder, establish requirements for affected sources related to control of emissions of pollutants that contribute to acid rain. For purposes of this permit, these requirements are referred to as Title IV provisions.

6.2.2 Applicable Emission Requirements

The owners and operators shall not violate applicable Title IV provisions. In particular, NO_x emissions of affected units shall not exceed the limit set by 40 CFR Part 76, which currently is 0.86 lb NO_x per million Btu heat input for boilers B1 and B2, and 0.45 lb NO_x per million Btu heat input for boiler B3, with the ability for averaging among units as allowed by an Acid Rain Permit. The Part 76 NO_x limits apply on an annual average basis. SO₂ emissions of the affected units shall not exceed any allowances that the source lawfully holds under Title IV provisions [Section 39.5(7)(g) and (17)(1) of the Act].

Note: Affected sources must hold SO₂ allowances to account for the SO₂ emissions from affected units at the source that are subject to Title IV provisions. Each allowance is a limited authorization to emit up to one ton of SO₂ emissions during or after a specified calendar year. The possession of allowances does not authorize exceedances of applicable emission standards or violations of ambient air quality standards.

6.2.3 Monitoring, Recordkeeping and Reporting

The owners and operators shall comply with applicable requirements for monitoring, recordkeeping and reporting specified by Title IV provisions, including 40 CFR Part 75 [Sections 39.5(7)(b) and 39.5(17)(m) of the Act].

Note: As further addressed by Section 7 of this permit, the following emission determination methods are currently being used for the affected units at this source.

NO_x: Continuous Emissions Monitoring (40 CFR 75.12)
SO₂: Continuous Emissions Monitoring (40 CFR 75.11)
Opacity: Continuous Opacity Monitoring (40 CFR 75.14)

6.2.4 Acid Rain Permit

The owners and operators shall comply with the terms and conditions of the source's Acid Rain permit. [Section 39.5(17)(1) of the Act]

Note: The source is subject to an Acid Rain permit, which was issued pursuant to Title IV provisions, including Section 39.5(17) of the Act. Affected sources must be operated in compliance with their Acid Rain

permits. This source's Acid Rain permit is incorporated by reference into this permit and a copy of the current Acid Rain permit is included as Attachment 5 of this permit. Revisions and modifications of this Acid Rain permit, including administrative amendments and automatic amendments (pursuant to Sections 408(b) and 403(d) of the CAA or regulations thereunder) are governed by Title IV provisions, as provided by Section 39.5(13)(e) of the Act. Accordingly, revision or renewal of the Acid Rain permit may be handled separately from this CAAPP permit and a copy of the new Acid Rain permit may be included in this permit by administrative amendment.

6.2.5 Coordination with Other Requirements

- a. This permit does not contain any conditions that are intended to interfere with or modify the requirements of Title IV provisions (Section 39.5(17)(h) of the Act). In particular, this permit does not restrict the flexibility under Title IV provisions of the owners and operators of this source to amend their Acid Rain compliance plan. [Section 39.5(13)(e) of the Act]
- b. Where another applicable requirement of the CAA is more stringent than an applicable requirement of Title IV provisions, both requirements are incorporated into this permit and are enforceable and the owners and operators shall comply with both requirements. [Section 39.5(7)(h) of the Act]

6.3 Cross-State Air Pollution Rule (CSAPR)/Transport Rule (TR) Trading Programs

6.3.1 Applicability

The USEPA issued the Cross-State Air Pollution Rule (CSAPR)*, also known as the Transport Rule (TR) in July 2011 to address CAA requirements concerning interstate transport of air pollution and to replace the previous Clean Air Interstate Rule (CAIR). For purposes of CSAPR, this source is a "TR NO_x Annual source", "TR NO_x Ozone Season source", and "TR SO₂ Group 1 source." The following emission units at this source are "TR NO_x Annual units," "TR NO_x Ozone Season units" and "TR SO₂ Group 1 units":

Boilers 1, 2, and 3

* Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals, 76 FR 48208 (August 8, 2011); Federal Implementation Plans for Iowa, Michigan, Missouri, Oklahoma, and Wisconsin and Determination for Kansas Regarding Interstate Transport of Ozone, 76 FR 80760 (December 27, 2011); Revisions to Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone, 77 FR 10324 (February 21, 2012); Revisions to Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone, 77 FR 34830 (June 12, 2012).

6.3.2 Applicable Emission Requirements

a. TR NO_x Annual Emissions Requirements

i. Pursuant to 40 CFR 97.406(c)(1), beginning January 1, 2015,

- A. As of the allowance transfer deadline for a control period in a given year, the owner and operator shall hold, in the source's compliance account, TR NO_x Annual allowances available for deduction for such control period under 40 CFR 97.424(a) and 97.406(c)(3) in an amount not less than the tons of total NO_x emissions for such control period from Baldwin Boilers 1, 2, and 3.
- B. If total NO_x emissions during a control period in a given year from the TR NO_x Annual units at a TR NO_x Annual source are in excess of the TR NO_x Annual emissions limitation set forth in paragraph (a)(i)(A) above, then:
 - I. The owner and operator and each TR NO_x Annual unit at the source shall hold the TR NO_x Annual allowances required for deduction under 40 CFR 97.424(d); and
 - II. The owner and operator and each TR NO_x Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act.

- ii. Beginning January 1, 2017, if total NO_x emissions during a control period in a given year from all TR NO_x Annual units at TR NO_x Annual sources in Illinois exceed the Illinois assurance level, the owner and operator shall comply with the provisions of 40 CFR 97.406(c)(2).
 - iii. Compliance periods.
 - A. A TR NO_x Annual unit shall be subject to the requirements under Condition 6.3.2(a)(i) for the control period starting on January 1, 2015, and for each control period thereafter [40 CFR 97.406(c)(3)(i)].
 - B. A TR NO_x Annual unit shall be subject to the requirements under Condition 6.3.2(a)(ii) above for the control period starting on January 1, 2017, and for each control period thereafter [40 CFR 97.406(c)(3)(ii)].
 - iv. Vintage of allowances held for compliance.
 - A. A TR NO_x Annual allowance held for compliance with the requirements under Condition 6.3.2(a)(i)(A) for a control period in a given year must be a TR NO_x Annual allowance that was allocated for such control period or a control period in a prior year [40 CFR 97.406(c)(4)(i)].
 - B. A TR NO_x Annual allowance held for compliance with the requirements under Conditions 6.3.2(a)(i)(B) or 6.3.2(a)(ii) for a control period in a given year must be a TR NO_x Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year [40 CFR 97.406(c)(4)(ii)].
 - v. Allowance Management System requirements. Each TR NO_x Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart AAAAA [40 CFR 97.406(c)(5)].
 - vi. Limited authorization. A TR NO_x Annual allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:
 - A. Such authorization shall only be used in accordance with the TR NO_x Annual Trading Program [40 CFR 97.406(c)(6)].
- b. TR NO_x Ozone Season Emissions Requirements
- i. Pursuant to 40 CFR 97.506(c)(1), beginning May 1, 2015,
 - A. As of the allowance transfer deadline for a control period in a given year, the owner and operator shall

hold, in the source's compliance account, TR NO_x Ozone Season allowances available for deduction for such control period under 40 CFR 97.524(a) and 97.506(c)(3) in an amount not less than the tons of total NO_x emissions for such control period from Baldwin Boilers 1, 2, and 3.

B. If total NO_x emissions during a control period in a given year from the TR NO_x Ozone Season units at a TR NO_x Ozone Season source are in excess of the TR NO_x Ozone Season emissions limitation set forth in Condition 6.3.2(b)(i)(A) above, then:

I. The owner and operator and each TR NO_x Ozone Season unit at the source shall hold the TR NO_x Annual allowances required for deduction under 40 CFR 97.524(d); and

II. The owner and operator and each TR NO_x Ozone Season unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart BBBBBB and the Clean Air Act.

ii. Beginning May 1, 2017, if total NO_x emissions during a control period in a given year from all TR NO_x Ozone Season units at TR NO_x Ozone Season sources in Illinois exceed the Illinois assurance level, the owner and operator shall comply with the provisions of 40 CFR 97.506(c)(2).

iii. Compliance periods.

A. A TR NO_x Ozone Season unit shall be subject to the requirements under Condition 6.3.2(b)(i) for the control period starting on May 1, 2015, and for each control period thereafter [40 CFR 97.506(c)(3)(i)].

B. A TR NO_x Ozone Season unit shall be subject to the requirements under Condition 6.3.2(b)(ii) above for the control period starting on May 1, 2017, and for each control period thereafter [40 CFR 97.506(c)(3)(ii)].

iv. Vintage of allowances held for compliance.

A. A TR NO_x Ozone Season allowance held for compliance with the requirements under Condition 6.3.2(b)(i)(A) for a control period in a given year must be a TR NO_x Annual allowance that was allocated for such control period or a control period in a prior year [40 CFR 97.506(c)(4)(i)].

B. A TR NO_x Ozone Season allowance held for compliance with the requirements under Conditions 6.3.2(b)(i)(B) or

6.3.2(b)(ii) for a control period in a given year must be a TR NO_x Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year [40 CFR 97.506(c)(4)(ii)].

- v. Allowance Management System requirements. Each TR NO_x Ozone Season allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart BBBB [40 CFR 97.506(c)(5)].
- vi. Limited authorization. A TR NO_x Ozone Season allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:
 - A. Such authorization shall only be used in accordance with the TR NO_x Ozone Season Trading Program [40 CFR 97.506(c)(6)].
- c. TR SO₂ Emissions Requirements
 - i. Pursuant to 40 CFR 97.606(c)(1), beginning January 1, 2015,
 - A. As of the allowance transfer deadline for a control period in a given year, the owner and operator shall hold, in the source's compliance account, TR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) and 97.606(c)(3) in an amount not less than the tons of total SO₂ emissions for such control period from Baldwin Boilers 1, 2, and 3.
 - B. If total SO₂ emissions during a control period in a given year from the TR SO₂ Group 1 units at a TR SO₂ Group 1 source are in excess of the TR SO₂ Group 1 emissions limitation set forth in paragraph (c)(i)(A) above, then:
 - I. The owner and operator and each TR SO₂ Group 1 unit at the source shall hold the TR SO₂ Group 1 allowances required for deduction under 40 CFR 97.624(d); and
 - II. The owner and operator and each TR SO₂ Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart CCCC and the Clean Air Act.
 - ii. Beginning January 1, 2017, if total SO₂ emissions during a control period in a given year from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in Illinois exceed the Illinois

assurance level, the owner and operator shall comply with the provisions of 40 CFR 97.606(c)(2).

iii. Compliance periods.

- A. A TR SO₂ Group 1 unit shall be subject to the requirements under Condition 6.3.2(c)(i) for the control period starting on January 1, 2015, and for each control period thereafter [40 CFR 97.606(c)(3)(i)].
- B. A TR SO₂ Group 1 unit shall be subject to the requirements under Condition 6.3.2(c)(ii) above for the control period starting on January 1, 2017, and for each control period thereafter [40 CFR 97.606(c)(3)(ii)].

iv. Vintage of allowances held for compliance.

- A. A TR SO₂ Group 1 allowance held for compliance with the requirements under Condition 6.3.2(c)(i)(A) for a control period in a given year must be a TR SO₂ Group 1 allowance that was allocated for such control period or a control period in a prior year [40 CFR 97.606(c)(4)(i)].
- B. A TR SO₂ Group 1 allowance held for compliance with the requirements under Conditions 6.3.2(c)(i)(B) or 6.3.2(c)(ii) for a control period in a given year must be a TR SO₂ Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year [40 CFR 97.606(c)(4)(ii)].

v. Allowance Management System requirements. Each TR SO₂ Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart CCCCC [40 CFR 97.606(c)(5)].

vi. Limited authorization. A TR SO₂ Group 1 allowance is a limited authorization to emit one ton of SO₂ during the control period in one year. Such authorization is limited in its use and duration as follows:

- A. Such authorization shall only be used in accordance with the TR SO₂ Group 1 Trading Program [40 CFR 97.606(c)(6)].

6.3.3 Monitoring, Recordkeeping, and Reporting

- a. The owner or operator must submit to the USEPA Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable [40 CFR 97.434(b), 97.534(b) and 97.634(b)].
- b. For TR NO_x Annual emissions, the owner or operator shall comply with the continuous monitoring, recordkeeping, and reporting provisions specified in 40 CFR Part 97 Subpart AAAAA, and 40 CFR Part 75

Subpart H. These provisions include the calculation requirements specified at 40 CFR 97.406(b)(2); the recordkeeping and reporting requirements specified at 40 CFR 97.406(e); the general monitoring, recordkeeping, and reporting requirements specified at 40 CFR 97.430; the monitoring system certification and recertification requirements specified at 40 CFR 97.431; the monitoring system out-of-control requirements specified at 40 CFR 97.432; the notification requirements specified at 40 CFR 97.433; the recordkeeping and reporting requirements specified at 40 CFR 97.434; and the petitions for alternatives to monitoring, recordkeeping, or reporting requirements specified at 40 CFR 75.66 and 97.435.

- c. For TR NO_x Ozone Season emissions, the owner or operator shall comply with the continuous monitoring, recordkeeping, and reporting provisions specified in 40 CFR Part 97 Subpart BBBB, and 40 CFR Part 75 Subpart H. These provisions include the calculation requirements specified at 40 CFR 97.506(b)(2); the recordkeeping and reporting requirements specified at 40 CFR 97.506(e); the general monitoring, recordkeeping, and reporting requirements specified at 40 CFR 97.530; the monitoring system certification and recertification requirements specified at 40 CFR 97.531; the monitoring system out-of-control requirements specified at 40 CFR 97.532; the notification requirements specified at 40 CFR 97.533; the recordkeeping and reporting requirements specified at 40 CFR 97.534; and the petitions for alternatives to monitoring, recordkeeping, or reporting requirements specified at 40 CFR 75.66 and 97.535.
- d. For TR SO₂ Group 1 emissions, the owner or operator shall comply with the continuous monitoring, recordkeeping, and reporting provisions specified in 40 CFR Part 97 Subpart CCCC, and 40 CFR Part 75 Subparts B, F and G. These provisions include the calculation requirements specified at 40 CFR 97.606(b)(2); the recordkeeping and reporting requirements specified at 40 CFR 97.606(e); the general monitoring, recordkeeping, and reporting requirements specified at 40 CFR 97.630; the monitoring system certification and recertification requirements specified at 40 CFR 97.631; the monitoring system out-of-control requirements specified at 40 CFR 97.632; the notification requirements specified at 40 CFR 97.633; the recordkeeping and reporting requirements specified at 40 CFR 97.634; and the petitions for alternatives to monitoring, recordkeeping, or reporting requirements specified at 40 CFR 75.66 and 97.635.

6.3.4 Designated Representative and Alternate Designated Representative

Pursuant to 40 CFR 97.406(a), 40 CFR 97.506(a), and 40 CFR 97.606(a), the owners and operators shall comply with the requirement to have a Designated Representative, and may also have an Alternate Designated Representative for Baldwin Boilers 1, 2, and 3, in accordance with 40 CFR 97.413 through 418 for the TR NO_x Annual Trading Program; 40 CFR 97.513 through 518 for the TR NO_x Ozone Season Trading Program; and 40 CFR 97.613 through 618 for the TR SO₂ Group 1 Trading Program.

6.3.5 Coordination with Other Requirements

- a. Any provisions of the TR NO_x Annual or Ozone Season or TR SO₂ Group 1 Trading Program that applies to a source or the designated representative shall also apply to the owners and operators of such source and the TR NO_x Annual or Ozone Season or TR SO₂ Group 1 units at the source [40 CFR 97.406(f)(1), 97.506(f)(1) and 97.606(f)(1)].
- b. Any provisions of the TR NO_x Annual or Ozone Season or TR SO₂ Group 1 Trading Program that applies to a TR NO_x Annual or Ozone Season or TR SO₂ Group 1 unit or the designated representative shall also apply to the owners and operators of such unit [40 CFR 97.406(f)(2), 97.506(f)(2) and 97.606(f)(2)].
- c. This permit does not contain any conditions that are intended to interfere with or modify the requirements of the Transport Rule, 40 CFR Part 97 Subparts AAAAA, BBBBB or CCCCC.
- d. Where another applicable requirement of the CAA is more stringent than an applicable requirement of 40 CFR Part 97 Subparts AAAAA, BBBBB, or CCCCC, both requirements are incorporated into this permit and are enforceable and the owners and operators of the source shall comply with both requirements [Section 39.5(7)(h) of the Act].
- e. No revision of this CAAPP permit is required for any allocation, holding, deduction, or transfer of TR NO_x Annual or Ozone Season or TR SO₂ Group 1 allowances in accordance with 40 CFR Part 97 Subparts AAAAA, BBBBB, or CCCCC [40 CFR 97.406(d)(1), 97.506(d)(1) and 97.606(d)(1)].

6.3.6 Effect on Other Authorities

No provision of the TR NO_x Annual or Ozone Season or TR SO₂ Group 1 Trading Programs or exemption under 40 CFR 97.405, 97.505 or 96.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO_x Annual or Ozone Season or TR SO₂ Group 1 source or unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act [40 CFR 97.406(g), 97.506(g) and 97.606(g)].

6.4 Control of Mercury Emissions from Coal-Fired Electric Generating Units and Multi-Pollutant Standard (MPS) Requirements for NO_x and SO₂

6.4.1 Description

The purpose of 35 IAC Part 225 Subpart B is to limit the emissions of mercury, nitrogen oxides and sulfur dioxide from coal-fired EGUs operating in Illinois. At the time of this permit issuance, only 35 IAC Part 225.233(a), (b), (e) and (g), 35 IAC Parts 225.291, 225.292, 225.293, 225.295 and 225.296, have been approved and incorporated by USEPA into the State Implementation Plan (SIP), which include the provisions relating to SO₂ and NO_x emissions. As the Subpart B provisions relating to mercury emissions have not been approved into the SIP, these requirements will be designated in this permit as "State-Only Requirements" in accordance with Section 39.5(7)(m) of the Act.

Note: The description in Condition 6.4.1 is for informational purposes only and implies no limits or constraints.

6.4.2 List of Emission Units

The EGUs associated with the following emission units at the source are affected EGUs for the purpose of 35 IAC Part 225 Subpart B:

Boiler 1
Boiler 2
Boiler 3

These affected EGUs are part of the MPS Group as described in the notice of intent submitted to the Illinois EPA in accordance with 35 IAC 225.233(b). The MPS Group consists of the Baldwin, Havana, Hennepin, Vermilion and Wood River Power Stations.

6.4.3 Emission Standards for EGUs

- a. Pursuant to 35 IAC 225.233(d)(1), the Permittee shall comply with one of the following standards for the affected EGUs, calculated in accordance with 35 IAC 225.230(a) or (d), on a rolling 12-month basis (State-Only Requirement):
 - i. An emission standard of 0.0080 lb mercury/GWh gross electrical output, provided that the Permittee monitors and records gross electrical output in accordance with 35 IAC 225.263 and 35 IAC 225.290(a)(2)(B); or
 - ii. A minimum 90-percent reduction of input mercury, provided that the Permittee conducts the necessary fuel sampling, analysis and recordkeeping in accordance with 35 IAC 225.265.
- b. Pursuant to 35 IAC 225.233(e)(2)(B), for the EGUs in the MPS Group, the Permittee must comply with an overall SO₂ annual emission rate of no more than 0.19 lb/million Btu.

- c. i. Pursuant to 35 IAC 225.233(e)(1)(A), for the EGUs in the MPS Group, the Permittee must comply with an overall NO_x annual emission rate of no more than 0.10 lb/million Btu.
- ii. Pursuant to 35 IAC 225.233(e)(1)(B) in each ozone season, for the EGUs in the MPS Group, the Permittee must comply with an overall NO_x seasonal emission rate of no more than 0.10 lb/million Btu.

6.4.4 Monitoring

- a. The Permittee shall install, operate and maintain the monitoring systems required pursuant to 35 IAC 225.240 through 225.270 for monitoring mercury mass emissions (including the systems required to monitor mercury concentration, stack gas moisture content, stack gas flow rate, and CO₂ or O₂ concentration, as applicable, in accordance with Sections 1.15 or 1.16 of 35 IAC 225 Appendix B) (State-Only Requirement).
- b. The applicable monitoring requirements for SO₂ and NO_x emissions from the affected boilers are set forth in Conditions 7.1.8(b) through (d).

6.4.5 Recordkeeping

- a. Pursuant to 35 IAC 225.290(a)(2), the Permittee shall maintain records for each month identifying the emission standard in Condition 6.4.3(a) used to demonstrate compliance or that is applicable for the affected EGU and the records, as specified in 35 IAC 225.290(a)(2) (State-Only Requirement).
- b. The Permittee shall maintain records of the following data (State-Only Requirement):
 - i. Monthly emissions of mercury from each affected EGU.
 - ii. For an affected EGU complying by means of 35 IAC 225.230(d), records of the monthly allowable emissions of mercury from the EGU.
- c. The Permittee shall maintain records related to quality assurance activities conducted for emissions monitoring systems pursuant to Section 2.2 of 35 IAC 225. Exhibit B (State-Only Requirement).
- d. The Permittee shall prepare and maintain a Mercury Emissions Monitoring Plan as specified in Section 1.10 of 35 IAC Part 225. Appendix B (State-Only Requirement).

6.4.6 Reporting

- a. Quarterly Reports. For any affected EGUs using CEMS or excepted monitoring systems at any time during a calendar quarter, the Permittee shall submit quarterly reports and compliance certifications to the Illinois EPA as required by 35 IAC 225.290(b) and (c) (State-Only Requirement).

- b. Annual Certification of Compliance. The Permittee shall submit to the Agency an Annual Certification of Compliance with 35 IAC Part 225 Subpart B no later than May 1 of each year, addressing compliance for the previous calendar year, as required by 35 IAC 225.290(d) (State-Only Requirement).
- c. Deviation Reports. For each affected EGU, the Permittee shall promptly notify the Agency of deviations from requirements of 35 IAC Part 225 Subpart B, as required by 35 IAC 225.290(e). These notifications must include a description of such deviations within 30 days after discovery of the deviations, and a discussion of the possible cause of such deviations, any corrective actions, and any preventative measures taken (State-Only Requirement).
- d. Quality Assurance RATA Reports. The Permittee shall submit to the Agency, Air Compliance and Enforcement Section, the quality assurance RATA report for each EGU or group of EGUs pursuant to Section 1.18(d)(4) of 35 IAC Part 225 Appendix B, within 45 days after completing a quality assurance RATA (State-Only Requirement).

6.5 Mercury and Air Toxics Standard (MATS) (40 CFR Part 63, Subpart UUUUU)

6.5.1 Description

On December 16, 2011, the United States Environmental Protection Agency (USEPA) signed a rule to limit emissions of hazardous air pollutants from power plants. Specifically, these mercury and air toxics standards (MATS) for power plants limit emissions from new and existing coal and oil-fired electric utility steam generating units (EGUs).

The rule establishes numeric emission standards for non-mercury HAP metals, mercury, and non-organic acid gases. It also establishes surrogate emission standards, including SO₂ (as a surrogate for non-organic acid gases), and filterable PM (as a surrogate for non-mercury HAP metals).

The standards set work practices for emissions of organic HAPs, including dioxin/furan. The work practice standards require periodic tune-ups for each unit that involves inspection, adjustment, and/or maintenance and repairs (if necessary) to ensure efficient combustion.

Note: The description in Condition 6.5.1 is for informational purposes only and implies no limits or constraints.

6.5.2 Applicability Provisions

Certain affected sources, as specified below, are "affected electric utility steam generating units (EGUs)" for the purposes of the National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units, pursuant to 40 CFR 63.9981 and 40 CFR 63.9982(a)(1), because the permittee owns or operates coal fired EGUs as defined at 40 CFR 63.10042. These affected EGUs are subject to the applicable requirements of the NESHAP, 40 CFR Part 63 Subpart UUUUU, and related requirements in the NESHAP General Provisions, 40 CFR Part 63, Subpart A.

Boiler 1
Boiler 2
Boiler 3

The affected EGUs are in the subcategory of existing EGUs designed for coal with a heating value greater than or equal to 8300 Btu/lb [40 CFR 63.9990].

6.5.3 Applicable Requirements

- a. Unless an affected EGU complies with the LEE requirements in Condition 6.5.9(b) or alternative requirements in Conditions 6.5.9(c) or (d), the Permittee shall comply with the following applicable requirements:
 - i. For non-mercury HAP metals,
 - A. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, emissions from the affected EGUs shall comply with one of the following limits:

- I. Emissions of filterable particulate matter shall not exceed, as a 30-boiler operating day rolling average:
 - a. 0.030 lb/mmBtu (mass per heat input); or
 - b. 0.30 lb/MWh (mass per gross output).
 - II. As an alternative to the standard in Condition 6.5.3(a)(i)(A)(I), the Permittee may elect to comply with the standard for individual or total non-mercury HAP metals as set forth in Condition 6.5.9(c).
- ii. For mercury,
- A. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, for affected EGUs not using emissions averaging, emissions of mercury from the affected EGUs shall not exceed, as a 30-boiler operating day rolling average:
 - I. 1.2 lb/TBtu (mass per heat input); or
 - II. 0.013 lb/GWh (mass per gross output).
 - B. Pursuant to 40 CFR 63.10009(a)(2), if the Permittee is using emissions averaging for mercury, emissions from the affected EGUs shall not exceed, as a 90-group boiler operating day rolling average:
 - I. 1.0 lb/TBtu (mass per heat input); or
 - II. 0.011 lb/GWh (mass per gross output).
- iii. For acid gases,
- A. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, emissions from the affected EGUs shall comply with one of the following limits:
 - I. Emissions of SO₂ shall not exceed, as a 30-boiler operating day rolling average:
 - a. 0.20 lb/mmBtu (mass per heat input); or
 - b. 1.5 lb/MWh (mass per gross output).
 - II. As an alternative to the standard in Condition 6.5.3(a)(iii)(A)(I), the Permittee may elect to comply with the standard for Hydrogen Chloride as set forth in Condition 6.5.9(d).
 - B. Pursuant to 40 CFR 63.9991(c)(2), if the Permittee is complying with the SO₂ limit in Condition 6.5.3(a)(iii)(A)(I), the Permittee must, at all times,

operate the wet or dry flue gas desulfurization technology and the SO₂ CEMS installed on the affected units consistent with 40 CFR 63.10000(b).

- b. The Permittee may use the emissions averaging provisions of 40 CFR 63.10009 and 40 CFR 63.10022 to demonstrate compliance with the emission standards specified in Conditions 6.5.3(a)(i), (ii)(B), and (iii).
- c. If the Permittee elects to switch from heat input based limits to gross output based limits (or vice-versa) in Condition 6.5.3(a) or to an alternate emission standard or provision in Conditions 6.5.9(c) through (e), the Permittee shall comply with the Notification of Compliance Status requirements in Condition 6.5.9(a).
- d. Pursuant to 40 CFR 63.10000(b), at all times the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
- e. Performance Tune-up Work Practices:

Pursuant to 40 CFR 63.9991(a)(1), and item 1 of Table 3 to Subpart UUUUU of 40 CFR Part 63, the Permittee shall conduct a tune-up of the EGU burner and combustion controls at least every 36 calendar months, or each 48 months if neural network combustion optimization software is employed, as specified at 40 CFR 63.10021(e).

6.5.4 Applicable Monitoring and Testing Requirements

- a. Unless an affected unit complies with the LEE requirements in Condition 6.5.9(b) or alternative requirements in Conditions 6.5.9(c) or (d), the Permittee shall comply with the following applicable requirements:
 - i. For non-mercury HAP metals,
 - A. For Boiler 1,

Pursuant to 40 CFR 63.10000(c)(1)(iv), in order to demonstrate compliance with the filterable particulate matter emission standard specified in Condition 6.5.3(a)(i)(A), the Permittee shall monitor continuous performance through performance testing repeated quarterly.
 - B. For Boiler 2 and 3,

- I. Pursuant to 40 CFR 63.10000(c)(1)(iv), in order to demonstrate compliance with the filterable particulate matter emission standard specified in Condition 6.5.3(a)(i)(A), the Permittee shall monitor continuous performance through a PM CEMS.
- II. The Permittee shall install, certify, operate, and maintain the PM CEMS in accordance with the requirements specified at 40 CFR 63.10010(i) and 40 CFR 63.10020(a) through (d).
 - ii. For mercury,

The Permittee shall monitor emissions of mercury from affected EGUs using a sorbent trap monitoring system in accordance with 40 CFR 63.10010(g), 40 CFR 63.10020(a) through (d), and Appendix A to 40 CFR Part 63 Subpart UUUUU.
 - iii. For Acid Gases,

Pursuant to 40 CFR 63.10000(c)(1)(v), to demonstrate compliance with the SO₂ emission limit specified in Condition 6.5.3(a)(iii), the Permittee shall operate and maintain an SO₂ CEMS in accordance with the requirements specified at 40 CFR 63.10010(f) and 40 CFR 63.10020(a) through (d).
 - iv. For Continuous Monitoring Systems,
 - A. The Permittee shall comply with the provisions of 40 CFR 63.10010(b), (c) and (d), and 40 CFR 63.10020(a) through (d) regarding CO₂ CEMS, stack gas flow rate monitoring, and stack gas moisture content.
 - B. Pursuant to 40 CFR 63.10007(f), since the Permittee uses a continuous monitoring system to monitor emissions of mercury, the Permittee may use the diluent cap and default gross output values as specified at 40 CFR 63.10007(f)(1) and (2) in emission rate calculations during startup and shutdown periods.

6.5.5 General Testing Requirements

- a. Pursuant to 40 CFR 63.10021(a), the Permittee shall conduct all performance testing in accordance with the requirements of 40 CFR 63.10007 and item 1 in Table 2, Table 5, and item 4 in Table 7 to Subpart UUUUU of 40 CFR Part 63.

6.5.6 General Recordkeeping Requirements

- a. The Permittee shall keep copies of any information and reports submitted to comply with the requirements of 40 CFR Part 63 Subpart UUUUU, and copies of any performance stack tests, CMS performance evaluations, and compliance demonstrations as specified at 40 CFR 63.10032(a).

- b. The Permittee shall keep records for any CMS as specified at 40 CFR 63.10032(b) and 40 CFR 63.10(c).
- c. The Permittee shall keep records of any monitoring data as specified at 40 CFR 63.10032(c) and 63.10(b)(2)(vii) through (ix).
- d. The Permittee shall keep records of any monthly fuel use, non-hazardous secondary materials combusted, and information for affected EGUs qualifying as LEE units as specified at 40 CFR 63.10032(d).
- e. The Permittee shall keep records for any emissions averaging as specified at 40 CFR 63.10032(e).
- f. The Permittee shall keep records regarding any startup or shutdown periods as specified at 40 CFR 63.10032(f) and (i).
- g. The Permittee shall keep records regarding any equipment malfunctions as specified at 40 CFR 63.10032(g) and (h).
- h. The Permittee shall keep records of any maintenance performed on air pollution control and monitoring equipment as specified at 40 CFR 63.10(b)(2)(iii).
- i. The Permittee shall keep records of any continuous monitoring system malfunctions and inoperative periods as specified at 40 CFR 63.10(b)(2)(vi).
- j. The Permittee shall keep records of any periods of monitored excess emissions as specified at 40 CFR 63.10(c)(7) and (8).
- k. The Permittee shall keep sorbent trap monitoring systems and other CMS system records as specified in Section 7.1 of Appendix A to 40 CFR Part 63 Subpart UUUUU.
- l. Pursuant to 40 CFR 63.10033 and 40 CFR 63.10(b)(1), the Permittee shall keep any required records on site for at least the first two years, but may be kept off-site after the first two years.

6.5.7 Reporting Requirements

- a. Pursuant to 40 CFR 63.10030(a), the Permittee shall submit the following notifications, as applicable, in accordance with the specified regulatory provision(s):
 - i. Periodic Test Notifications, as specified at 40 CFR 63.7(b), 40 CFR 63.9(e), and 40 CFR 63.10030(d), to be submitted at least 30 days before the test is scheduled to begin.
 - ii. Continuous Monitoring System Performance Evaluation Notices, as specified at 40 CFR 63.8(e).
 - iii. Alternative Monitoring Requests, as specified at 40 CFR 63.8(f)(4).
 - iv. Alternative RATA Requests, as specified at 40 CFR 63.8(f)(6).

- v. Special Compliance Requirements Notices, as specified at 40 CFR 63.9(d).
- vi. Additional CMS Notifications, as specified at 40 CFR 63.9(g).
- vii. Notifications of Compliance Status, as specified at 40 CFR 63.9(h), 40 CFR 63.10030(e) and Condition 6.5.9(a)(i).
- b. Pursuant to 40 CFR 63.10031(b), the Permittee shall submit a Semiannual Compliance Report no later than January 31 and July 31 of each year. Each Semiannual Compliance Report shall contain the information specified at 40 CFR 63.10031(c) through (d) and (g).
 - i. Pursuant to 40 CFR 63.10031(e), the Permittee shall report deviations from the applicable requirements of 40 CFR Part 63 Subpart UUUUU (as defined at 40 CFR 63.10042) in the Semiannual Compliance Report.
- c. Pursuant to 40 CFR 63.10031(f) and 40 CFR 63.10(d)(1) and (2), the Permittee shall submit reports of performance tests and CEMS performance evaluations required by 40 CFR Part 63 Subpart UUUUU no later than 60 days after completion.
- d. The Permittee shall comply with any applicable reporting requirements for mercury CEMS and sorbent trap monitoring systems specified at Sections 7.2.1 through 7.2.4 of Appendix A to 40 CFR Part 63 Subpart UUUUU.
- e. Pursuant to Section 7.2.5 of Appendix A to 40 CFR Part 63 Subpart UUUUU, the Permittee shall submit any required mercury CEMS and sorbent trap monitoring system data quarterly within 30 days after the end of each calendar quarter, using the ECMPS Client Tool.
- f. The Permittee shall comply with any applicable reporting requirements for HCl CEMS specified at Sections 11.1 through 11.4 of Appendix B to 40 CFR Part 63 Subpart UUUUU.
- g. Pursuant to Section 11.5 of Appendix B to 40 CFR Part 63 Subpart UUUUU, the Permittee shall submit any required HCl CEMS data quarterly within 30 days after the end of each calendar quarter, using the ECMPS Client Tool.

6.5.8 Startup/Shutdown Provisions

- a. Pursuant to 40 CFR 63.9991(a)(1) and 40 CFR 63.10021(h), the Permittee shall comply with the control device operation, fuel usage, monitoring, recordkeeping, and reporting requirements specified in items 3 and 4 of Table 3 to Subpart UUUUU of 40 CFR Part 63 during startup periods and shutdown periods (as those terms are defined at 40 CFR 63.10042) of the affected EGUs.
 - i. The Permittee has elected to use paragraph (1) of the definition of "startup" in 40 CFR 63. 63.10042, and must therefore operate all CMS during startup and use "clean fuels" as defined at 40 CFR 63.10042 for ignition.

- ii. Pursuant to 40 CFR 63.10030(e)(8)(iii), the Permittee may switch from paragraph (1) of the definition of "startup" in 40 CFR 63.10042 to paragraph (2) of the definition of "startup" (or vice-versa), provided that the Permittee follows the procedure specified at 40 CFR 63.10030(e)(8)(iii)(A) through (E).
- iii. Pursuant to 40 CFR 63.10030(e)(8)(i), should the Permittee choose to rely on paragraph (2) of the definition of "startup" in 40 CFR 63.10042 for an EGU, the Permittee shall submit a report that identifies EGU and PM control device design characteristics and other information as specified at 40 CFR 63.10030(e)(8)(i)(A) through (K) that shall be prepared, signed, and sealed by a professional engineer licensed in Illinois.

6.5.9 Alternative Requirements

a. Notification Requirements:

Pursuant to Section 39.5(7)(b) of the Act and 40 CFR 63.10030(e)(8)(iii)(A),

- i. If the Permittee elects to change from compliance with a mass per heat input basis emission limit (e. g., lb/mmBtu) to a mass per gross output basis emission limit (e. g., lb/MWh), or vice-versa, the Permittee shall comply with the requirements specified at 40 CFR 63.10030(e)(7)(iii)(A) through (C).
- ii. If the Permittee elects to switch from the paragraph (1) definition of startup at 40 CFR 63.10042 to the paragraph (2) definition of startup, or vice-versa, the Permittee shall comply with the requirements specified at 40 CFR 63.10030(e)(8)(iii)(A) through (E).
- iii. If the Permittee elects to change other 40 CFR Part 63 Subpart UUUUU compliance demonstration methods as described by Condition 6.5.9(b) through (e) that renders the compliance demonstration methodology information contained in the most recently-submitted Notification of Compliance Status incorrect, the Permittee shall submit an advance notice to Illinois EPA at least 60 days prior to implementing the change. In the advance notice, the Permittee shall include the information necessary for Illinois EPA to determine the applicable requirements pertaining to the change, and any relevant performance test results necessary to demonstrate compliance with the new method, if applicable. The Permittee shall comply with written directives issued by Illinois EPA in response to such advance notice, and may proceed with implementing the change if not directed otherwise in writing by Illinois EPA within 45 days after submission of the change notice. The Permittee shall also comply with applicable requirements to submit a revised Notification of Compliance Status to Illinois EPA no later than 60 days following the change.

b. Low Emitting EGU (LEE) Alternative Requirements:

i. LEE Status for mercury (Hg):

An EGU may qualify for LEE status for Hg if the Permittee collects performance test data that meet the requirements of 40 CFR 63.10005(h), and if those data demonstrate:

A. For Hg emissions from an existing EGU, either:

I. Average emissions less than 10 percent of the applicable Hg emissions limit in Table 2 to 40 CFR Part 63 Subpart UUUUU (expressed either in units of lb/TBtu or lb/GWh); or

II. Potential Hg mass emissions of 29.0 or fewer pounds per year and compliance with the applicable Hg emission limit in Table 2 to 40 CFR Part 63 Subpart UUUUU (expressed either in units of lb/TBtu or lb/GWh).

B. If test data demonstrate that an affected EGU qualifies for LEE status for the mercury emission standard specified in Condition 6.5.3(a)(ii) by satisfying the LEE criteria specified at 40 CFR 63.10005(h)(1)(ii), the Permittee shall conduct performance testing as specified at 40 CFR 63.10005(h)(3) at least once every 12 calendar months, as specified at 40 CFR 63.10000(c)(1)(ii).

C. Pursuant to 40 CFR 63.10006(b)(2), if subsequent emission test results show that the affected EGU no longer satisfies the criteria for LEE status, the Permittee shall install, certify, operate, and maintain a mercury CEMS or sorbent trap monitoring system in accordance with Appendix A to 40 CFR Part 63 Subpart UUUUU within 6 months of losing LEE eligibility, and conduct quarterly mercury emissions testing until the mercury CEMS or sorbent trap monitoring system is installed, certified, and operating.

ii. LEE Status for HCl, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals:

An EGU may qualify for LEE status for HCl, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals if the Permittee collects performance test data that meet the requirements of 40 CFR 63.10005(h), and if those data demonstrate:

A. For HCl, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals, performance test emissions results less than 50 percent of the applicable emissions limits in Table 2 to 40 CFR Part 63, Subpart UUUUU for all required testing for 3 consecutive years.

- B. If test data demonstrates that an affected EGU qualifies for LEE status for total non-Hg HAP metals, individual non-Hg HAP metals, filterable particulate matter, or HCl standards specified in Conditions 6.5.9(c)(i)(A)(I), 6.5.9(c)(i)(A)(II), 6.5.3(a)(i)(A)(I), or 6.5.9(d)(i)(A)(I), respectively, by satisfying the LEE criteria specified at 40 CFR 63.10005(h)(1) and (2), the Permittee shall conduct a performance test at least once every 36 calendar months, as specified at 40 CFR 63.10000(c)(1)(iii).
- C. Pursuant to 40 CFR 63.10006(b)(1), if subsequent emission test results show that the affected EGU no longer satisfies the criteria for LEE status, the Permittee shall resume conducting quarterly stack testing for total non-Hg HAP metals, individual non-Hg HAP metals, filterable PM, or HCl or shall install, certify, and operate a PM CEMS, HCl CEMS, SO₂ CEMS, or PM CPMS, as applicable.
- c. i. Non-mercury HAP Metals Alternative Requirements:
- A. The Permittee may elect to comply with a non-mercury HAP metals standard as an alternative to the filterable particulate matter standard set forth in Condition 6.5.3(a)(i). Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, for affected EGUs not satisfying the criteria for LEE status, the Permittee may elect to comply with one of the following limits either individually or using the applicable emissions averaging provisions of 40 CFR 63.10009 and 63.10022:
- I. Emissions of total non-Hg HAP metals from the affected EGUs shall not exceed, as a 30-boiler day operating average, 0.000050 lb/mmBtu (mass per heat input) or 0.50 lb/GWh (mass per gross output); or
- II. Emissions of individual non-Hg HAP metals (Sb, As, Be, Cd, Cr, Co, Pb, Mn, Ni, Se) shall not exceed, as a 30-boiler operating day rolling average, the following limits specified in Table 2 to Subpart UUUUU of 40 CFR Part 63:

Pollutant:	Emission Limit (Mass Per Heat Input):	OR	Emission Limit (Mass Per Gross Output):
Antimony (Sb)	0.80 lb/TBtu	OR	0.0080 lb/GWh
Arsenic (As)	1.1 lb/TBtu	OR	0.020 lb/GWh
Beryllium (Be)	0.20 lb/TBtu	OR	0.0020 lb/GWh
Cadmium (Cd)	0.30 lb/TBtu	OR	0.0030 lb/GWh
Chromium (Cr)	2.8 lb/TBtu	OR	0.030 lb/GWh
Cobalt (Co)	0.80 lb/TBtu	OR	0.0080 lb/GWh
Lead (Pb)	1.2 lb/TBtu	OR	0.020 lb/GWh
Manganese (Mn)	4.0 lb/TBtu	OR	0.050 lb/GWh
Nickel (Ni)	3.5 lb/TBtu	OR	0.040 lb/GWh
Selenium (Se)	5.0 lb/TBtu	OR	0.060 lb/GWh

- ii. Non-mercury HAP Metals Alternative Monitoring Provisions:
 - A. For Boiler 1,
 - I. If the Permittee elects to demonstrate compliance with the filterable particulate matter emission limit specified in Condition 6.5.3(a)(i) using PM CEMS, the Permittee shall install, certify, operate, and maintain the PM CEMS in accordance with the requirements specified at 40 CFR 63.10010(i) and 40 CFR 63.10020(a) through (d).
 - II. If the Permittee elects to demonstrate compliance with the filterable particulate matter emission limit specified in Condition 6.5.3(a)(i) using PM CPMS, the Permittee shall install, certify, operate, and maintain the PM CPMS in accordance with the requirements specified at 40 CFR 63.10010(h) and 40 CFR 63.10020(a) through (d), and Table 6 to 40 CFR Part 63, Subpart UUUUU.
 - B. For Boiler 2 and 3,
 - I. If the Permittee elects to demonstrate compliance with the filterable particulate matter emission standard specified in Condition 6.5.3(a)(i)(A) without using a PM CEMS or PM CPMS, the Permittee shall monitor continuous performance through performance testing repeated quarterly.
 - II. If the Permittee elects to demonstrate compliance with the filterable particulate matter emission limit specified in Condition 6.5.3(a)(i) using PM CPMS, the Permittee shall install, certify, operate, and maintain the PM CPMS in accordance with the requirements specified at 40 CFR 63.10010(h) and 40 CFR 63.10020(a) through (d), and Table 6 to 40 CFR Part 63, Subpart UUUUU.
- d. i. Acid Gases Alternative Emission Standards:
 - A. The Permittee may elect to comply with a standard for emissions of HCl as an alternative to the SO₂ standards set forth in Condition 6.5.3(a)(iii)(A)(I). Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, for affected EGUs not satisfying the criteria for LEE status, the Permittee may elect to comply with the following limit, either individually or using the applicable emissions averaging provisions of 40 CFR 63.10009 and 63.10022:
 - I. Emissions of Hydrogen Chloride shall not exceed, as a 30-boiler operating day rolling average, 0.0020 lb/mmBtu (mass per heat input) or 0.020 lb/MWh (mass per gross output).

ii. Acid Gases Alternative Testing Provisions:

Pursuant to 40 CFR 63.10000(c)(1)(v), in order to demonstrate compliance with the emission standard specified in Condition 6.5.9(d)(i), if the affected source does not use an HCl continuous emission monitoring system (HCl CEMS), the Permittee shall demonstrate continuous compliance through HCl performance testing repeated quarterly.

iii. Acid Gases Alternative Monitoring Provisions:

If the Permittee elects to demonstrate compliance with the HCl emission limit specified in Condition 6.5.9(d)(i)(A)(I) using an HCl CEMS, the Permittee shall install, certify, operate, and maintain the HCl CEMS in accordance with the requirements specified at 40 CFR 63.10010(e), 40 CFR 63.10020(a) through (d), and Appendix B to 40 CFR Part 63 Subpart UUUUU.

e. Mercury Alternative Monitoring Provisions:

The Permittee may elect to monitor emissions of mercury from affected EGUs using a mercury CEMS monitoring system in accordance with 40 CFR 63.10010(g), 40 CFR 63.10020(a) through (d), and Appendix A to 40 CFR Part 63 Subpart UUUUU, as an alternative to a sorbent trap monitoring system, as described in Condition 6.5.4(a)(ii).

6.6 Consent Decree

- a. This source is subject to certain requirements that were established by the Consent Decree in *United States of America and the State of Illinois, American Bottom Conservancy, Health and Environmental Justice-St. Louis, Inc., Illinois Stewardship Alliance, and Prairie Rivers Network, v. Illinois Power Company and Dynegy Midwest Generation, Inc.*, Civil Action No. 99-833-MJR, U.S. District Court, Southern District of Illinois (Consent Decree), which is attached as Attachment 7. Subject to the following terms and conditions, pursuant to Paragraph 158 of the Consent Decree the paragraphs of the Consent Decree listed in the Schedule that is Attachment 6 to this permit are incorporated by reference into this permit.
- b. The Permittee has requested that the CAAPP permit for the Baldwin Energy Complex reflect certain commitments required under the Consent Decree. Subject to the following terms and conditions, the emission-related paragraphs of the Consent Decree listed in Attachment 6 to this permit are incorporated by reference into this permit. 415 ILCS 5/39.5(7)(a).
 - i. Each Consent Decree paragraph listed in Attachment 6 to this permit is incorporated by reference in its entirety, along with any and all paragraphs of the Consent Decree that are explicitly referenced in each such paragraph. All other Consent Decree paragraphs are not incorporated into this permit.
 - ii. The Permittee's obligation under this permit to comply with the emission limitations and requirements in the paragraphs of the Consent Decree, as incorporated into this permit by reference through inclusion in Attachment 6, is limited to the limitations and requirements applicable to, and only to the extent applicable to, the Baldwin Energy Complex.
 - iii. When the Consent Decree is amended, including by the order of the U.S. District Court in Civil Action No. 99-833-MJR dated August 9, 2006, which is attached as Attachment 8, the terms and conditions of the amended Consent Decree shall apply to this permit as of the date that the Consent Decree is amended or such other date provided in the amendment to the Consent Decree.
 - iv. Compliance with the incorporated paragraphs of the Consent Decree listed in Attachment 6 to this permit shall be determined solely by reference to the terms and conditions of the Consent Decree. If any conflict arises between the terms of this permit and the terms of the Consent Decree, with respect to the emission limitations and requirements under the Consent Decree, the terms and conditions of the Consent Decree shall control. Without limiting the foregoing, to the extent there is any conflict between the definitions included elsewhere in this permit and the definitions provided in the Consent Decree, the definitions of the Consent Decree shall control with respect to the interpretation and implementation of the limitations and requirements of the Consent Decree incorporated into this permit through Attachment 6.

- c. The Permittee shall keep records as needed to reasonably demonstrate compliance with each limitation and requirement set forth in those incorporated paragraphs, including the following:
 - i. Records for the operation of any Baldwin pollution control device required to Continuously Operate by Paragraphs 55, 56 or 83 of the Consent Decree.
 - ii. Records for the implementation of the operational practices and work practices at Baldwin that are determined pursuant to Paragraph 84 of the Consent Decree.
 - iii. Records for the data collected by the SO₂ and PM continuous emission monitoring systems (CEMS) at Baldwin required by Paragraphs 82 and 91, respectively, the Consent Decree.
 - iv. Records for the operation, calibration and maintenance of the SO₂ and PM CEMS required by the Consent Decree.
 - v. A copy of any report submitted to the Illinois EPA pursuant to the Consent Decree, including a copy of any test report.
- d. All records required by Condition 6.6(c) shall be retained for at least five years from creation, shall be readily accessible to the Permittee and Illinois EPA and made available for inspection upon request by Illinois EPA.

6.7 Best Available Retrofit Technology (BART)

6.7.1 Description

- a. Pursuant to Section 169A of the Clean Air Act, USEPA has determined that as Part of its strategy to reduce visibility impairing air pollutants, such as oxides of nitrogen (NO_x), sulfur dioxide (SO₂), and particulate matter (PM), certain stationary emission sources should be subject to a Best Available Retrofit Technology (BART) standard. BART is defined as an "emission limitation based on the degree of reduction available through the application of the best system of continuous emission reduction for each pollutant which is emitted by an existing stationary facility" (40 CFR 51.301).
- b. The sources subject to a BART standard, according to "Guidelines for BART Determinations under the Regional Haze Rule" ("BART Guidelines") published by USEPA in July of 2005, must be one of 26 specified source categories; were in existence in August 1977; began operating after August 1962; and have the potential to emit 250 tons per year or more of any air pollutant.
- c. For coal-fired EGUs, the BART Guidelines provide presumptive emission limits or control levels for various boiler and coal types. The Illinois EPA has compared these presumptive BART emission levels to existing emission reduction requirements and commitments for the subject-to-BART EGUs in Illinois.

Note: The description in Condition 6.7.1 is for informational purposes only and implies no limits or constraints.

6.7.2 Applicability

This source is an affected source and the following emission units at the source are affected units for BART:

Boiler 1
Boiler 2
Boiler 3

6.7.3 BART Controls for EGUs/Emission Standards

The requirements for the affected units for SO₂ and NO_x emissions set forth in the Multi-Pollutant Standard ("MPS") in 35 IAC 225.233 have been determined by USEPA to satisfy BART [77 Fed Reg. 39943]. The requirements are addressed in Condition 6.4 above.

7.0 UNIT SPECIFIC CONDITIONS

7.1 Coal Fired Boilers

7.1.1 Description

The Permittee operates three coal-fired boilers for electric generation. The construction of the boilers commenced in 1967. The boilers are served by three separate stacks. The boilers have nominal heat inputs of 5,788 mmBtu/hr (Boiler 1), 5,788 mmBtu/hr (Boiler 2) and 6,300 mmBtu/hr (Boiler 3). These boilers also have the capability to fire at various modes such as combination of coal, and/or fuel oil as their principal fuel. These boilers fire fuel oil as auxiliary fuel during startup and for flame stabilization.

Nitrogen oxide (NO_x) emissions from Boilers 1 and 2 are controlled by a combination of Over-Fire Air (OFA) and Selective Catalytic Reduction (SCR) systems. NO_x emissions from Boiler 3 are controlled by combustion optimization using Low NO_x burners followed by a Separated Over-Fire Air (SOFA) system. Particulate matter (PM) emissions from the boilers are controlled by electrostatic precipitators (ESP) and baghouses. Sulfur Dioxide (SO₂) emissions from the boilers are controlled by flue gas desulfurization (FGD) systems. Mercury emissions from the boilers are controlled by injection of activated carbon or by burning refined coal which is supplied by CyClean.

Note: The description in Condition 7.1.1 is for informational purposes only and implies no limits or constraints.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Unit	Description	Emission Control Equipment
Boiler 1	Coal-Fired Boiler	OFA, SCR, ESP, ACI, FGD and Baghouses
Boiler 2	Coal-Fired Boiler	OFA, SCR, ESP, ACI, FGD and Baghouses
Boiler 3	Coal-Fired Boiler	LNB, SOFA, ESP, ACI, FGD and Baghouses

7.1.3 Applicability Provisions

- a. An "affected boiler" for the purpose of these unit-specific conditions is a boiler described in Conditions 7.1.1 and 7.1.2.
- b. Startup Provisions

Subject to the following terms and conditions, the Permittee is authorized to operate an affected boiler in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123), Condition 7.1.4(b) (35 IAC 212.202 and 212.203), Condition 7.1.4(c) (35 IAC 214.185, Condition 7.1.4(d) (35 IAC 216.121), during startup. This authorization is provided pursuant to 35 IAC 201.149, 201.261

and 201.262, as the Permittee has applied for such authorization in its application, generally describing the efforts that will be used "...to minimize startup emissions, duration of individual startups and frequency of startups."

- i. This authorization does not relieve the Permittee from the continuing obligation to demonstrate that all reasonable efforts are made to minimize startup emissions, duration of individual startups and frequency of startups.
- ii. The Permittee shall conduct startup of an affected boiler in accordance with written procedures prepared by the Permittee and maintained in the control room for the boiler, that are specifically developed to minimize emissions from startups and that include, at a minimum, the following measures:
 - A. Use of auxiliary fuel burners to heat the boiler prior to initiating burning of coal.
 - B. Timely energization of the electrostatic precipitator as soon as this may be safely accomplished without damage or risk to personnel or equipment.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.1.9(g) and 7.1.10-2(a).
- iv. As provided by 35 IAC 201.265, an authorization in a permit for excess emissions during startup does not shield a Permittee from enforcement for any violation of applicable emission standard(s) that occurs during startup and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

c. Malfunction and Breakdown Provisions

Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected boiler in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123), Condition 7.1.4(b) (35 IAC 212.202 and 212.203), Condition 7.1.4(c) (35 IAC 214.185) and Condition 7.1.4(d) (35 IAC 216.121), in the event of a malfunction or breakdown of an affected boiler, including the coal conditioner, the ash removal system, or the electrostatic precipitator. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize

emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

- i. This authorization only allows such continued operation as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable reduce boiler load, repair the affected boiler, remove the affected boiler from service or undertake other action so that excess emissions cease.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.1.9(h) and 7.1.10-3(a). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the boiler out of service.
- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.1.4 Applicable Emission Standards

- a. The applicable requirements for the opacity of the emission of smoke or other particulate matter from the affected boilers are set forth in Condition 5.2.2(b).
- b.
 - i. The emissions of PM from affected boilers 1 and 2 shall each not exceed 0.20 lb/mmBtu of actual heat input in any one hour period, pursuant to 35 IAC 212.203. This standard applies because the affected boilers qualify for the alternative standard provided by this rule, as recognized by the Illinois Pollution Control Board in

Regulatory Proceeding R82-1. In particular, in accordance with 35 IAC 212.203(a), as of April 14, 1972, the affected boilers had hourly emission rates based on the stricter of the original design or equipment performance test conditions that were less than 0.20 lb/mmBtu of actual heat input, i.e., 0.15 lb/mmBtu. Thereafter, under this rule, the emission rates are not allowed to degrade by more than 0.05 lb/mmBtu from the base emission rate, resulting in an emission standard of 0.20 lb/mmBtu.

ii. The emissions of PM from affected boiler 3 shall not exceed 0.1 lbs/mmBtu of actual heat input in any one hour period, pursuant to 35 IAC 212.202.

c. Pursuant to 35 IAC 214.185, emissions of SO₂ from the affected boilers shall not exceed 101,966 lbs/hour, in the aggregate, and 6 lbs/mmBtu.

Note: These are the site-specific mass emission limitations for SO₂ for the Baldwin Energy Complex (then known as the Baldwin Power Plant) pursuant to the Order of the Illinois Pollution Control Board, September 8, 1983 in proceeding PCB 79-7.] These limitations were approved by USEPA as part of Illinois' SIP (refer to 40 CFR 52.720(d)).)

d. The emissions of CO from each affected boiler shall not exceed 200 ppm, corrected to 50 percent excess air, pursuant to 35 IAC 216.121.

e. The Acid Rain Program applicable requirements for the affected boilers are set forth in Condition 6.2.

f. The EGUs at the source are each subject to the following requirements related to NO_x emissions pursuant to 35 IAC Part 217 Subpart V:

i. During each ozone control period (May 1 through September 30):

A. The emissions of NO_x from each EGU shall not exceed 0.25 lb/mmBtu of actual heat input based on an ozone control period average for that EGU, pursuant to 35 IAC 217.706(a), or

B. Notwithstanding the requirement in Condition 7.1.4(f)(i)(A), if the Permittee elects to participate in a NO_x averaging plan pursuant to 35 IAC 217.708(a), the average rate of emissions of NO_x from the Permittee's EGUs and all other eligible EGUs that are participating in such NO_x averaging demonstration shall not exceed 0.25 lbs/mmBtu of actual heat input, as averaged for the ozone control period, pursuant to 35 IAC 217.708(a) and (b). For this purpose, eligible EGUs include: (1) EGUs at this source, which are

authorized by this permit to participate in a NOx averaging demonstration, and (2) any other EGU that is authorized to participate in a NOx averaging plan by a CAAPP permit or other federally enforceable permit issued by the Illinois EPA to the owner or operator of that EGU.

Note: Given the emission determination methods specified by 35 IAC 217.710, the emissions of NOx for purposes of these standards are generally calculated in accordance with the federal Acid Rain Program and are different from the emissions determined for purposes of the NOx Trading Program.

- ii. If the Permittee elects to have an EGU comply by participation in a NOx averaging demonstration as provided for and authorized above:
 - A. The EGU shall be included in only one NOx averaging demonstration during an ozone control period, pursuant to 35 IAC 217.708(d).
 - B. The NOx averaging demonstration shall only include other EGUs that are authorized through a federally enforceable permit to participate in a NOx averaging demonstration and for which the owner or operator of the EGUs maintains the required records, data and reports and submits copies of such records, data, and reports to the Illinois EPA upon request, pursuant to 35 IAC 217.708(c) and (g).
 - C. The effect of failure of the NOx averaging demonstration to show compliance shall be that the compliance status of the EGU shall be determined pursuant to Condition 7.1.4(f)(i)(A) as if the NOx emission rate of the EGU was not averaged with other EGUs, pursuant to 35 IAC 217.708(f).

Note: The above requirements also apply as a matter of rule to EGUs other than the Baldwin EGUs if the owner or operator of such other EGUs elects to participate in a NOx averaging demonstration.

- g. The Cross-State Air Pollution Rule applicable requirements for the affected boilers are set forth in Condition 6.3.
- h. The 35 IAC 225 Subpart B applicable requirements for the affected boilers are set forth in Condition 6.4.
- i. The Mercury and Air Toxics Standards rule applicable requirements for the affected boilers are set forth in Condition 6.5.
- j. Emission related requirements from the Consent Decree for the affected boilers are set forth in Condition 6.6.

- k. The Best Available Retrofit Technology applicable requirements for the affected boilers are set forth in Condition 6.7.

7.1.5 Non-Applicability of Regulations of Concern

- a. Pursuant to Section 39.5(7)(a) of the Act,
- i. The Permittee is shielded from the following standards for an affected boiler when the boiler is using coal (solid fuel) as its principal fuel. This is because incidental use of natural gas or liquid fuel generally serves as a good combustion practice for firing of solid fuel and does not provide a decrease in emissions that can be used to reduce the emission rate that must be achieved for the emissions associated with combustion of solid fuel:
- A. 35 IAC 212.207.
- B. 35 IAC 214.162.
- ii. If an affected boiler is not using coal (solid fuel) as its principal fuel, the affected boiler shall comply with the requirements of the following conditions. During such periods, for PM emissions, Condition 7.1.5(a)(ii)(A), below, shall substitute for Condition 7.1.4(b). For SO₂ emissions, Condition 7.1.5(a)(ii)(B), below, shall supplement Condition 7.1.4(c):
- A. The emissions of PM from the affected boiler in any one-hour period shall not exceed the amount, in lbs/hr, allowed by the formula in 35 IAC 212.207. For this purpose, the applicable PM standard for heat input from liquid fuel shall be 0.1 lb/mmBtu, pursuant to 35 IAC 212.206 and 212.207.
- B. The emissions of SO₂ from the affected boiler in any one-hour period shall not exceed the amount, in lbs/hr, allowed by the formula in 35 IAC 214.162. For this purpose, the applicable SO₂ standards for heat input of liquid fuels shall be:
- I. Residual fuel oil: 0.105 lb/mmBtu. [35 IAC 214.162(d) and Section 39.5(7)(a) of the Act]
- II. Distillate fuel oil: 0.0015 lb/mmBtu. [35 IAC 214.162(d)]
- iii. For the purpose of the above conditions, an affected boiler shall be considered to be using coal (solid fuel) as its principal fuel if the use of natural gas and/or fuel oil is incidental to the use of solid fuel, occurring for specific purposes associated with routine

firing of solid fuel, such as startup, opacity reduction emission mitigation, flame stabilization, outage of a coal conditioner, or other temporary interruption in solid fuel supply. A boiler shall not be considered to be using solid fuel as its principal fuel if the use of natural gas and/or fuel oil is more than incidental to the firing of solid fuel in the boiler or the use of solid fuel is incidental to the operation of the boiler.

- iv. The Permittee shall notify the Illinois EPA if the status of an affected boiler changes to or from using coal (solid fuel) as its principal fuel. This notification shall be provided at least 7 days in advance of such change in status unless the change results from a sudden event that precludes such advance notification, in which case notification shall be provided as soon as practicable prior to the change.
- b. Pursuant to 35 IAC 201.403(a), the Permittee is not subject to the requirements of 35 IAC Part 201 Subpart L for opacity monitoring because the Permittee is conducting opacity monitoring on the affected boilers in accordance with the provisions of the NSPS, as specified at 40 CFR 75.14 of the federal Acid Rain program.
- c. The affected boilers are not subject to 40 CFR Part 60 Subpart D, Standards of Performance for Fossil-Fuel Fired Steam Generators because the affected boiler commenced construction prior to the applicability date of August 17, 1971 and were not modified after the applicable date.
- d. The affected boilers are not subject to 40 CFR Part 60 Subpart Da, Standards of Performance for Electric Utility Steam Generating Units because the affected boiler did not commence construction, modification or reconstruction after September 18, 1978.
- e. This permit is issued based on the affected boilers not being subject to 40 CFR Part 60 Subpart CCCC, Standards of Performance for Commercial and Industrial Solid Waste Incineration Units because the affected boiler does not combust any solid waste as that term is defined in 40 CFR part 241.
- f. The affected boilers are not subject to 40 CFR Part 63 Subpart DDDDD or JJJJJJ, NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. This is because electric utility steam generating units (EGU) covered by 40 CFR 63 Subpart UUUUU are not subject to 40 CFR 63 Subpart DDDDD or JJJJJJ.
- g. The affected boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for SO₂ and NO_x Acid Rain Requirements, pursuant to 40 CFR 64.2(b)(1)(iii), because the affected boilers are subject to Acid Rain Program requirements.

- h. The affected boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for SO₂ (Conditions 6.4.3(b) and 7.1.4(c)), NO_x (Conditions 6.4.3(c) and 7.1.4(f)), and mercury (Condition 6.4.3(a)) State Rule Requirements, pursuant to 40 CFR 64.2(b)(1)(vi), because the affected boilers are subject to an emission limitation or standard for which this CAAPP permit specifies a continuous compliance determination method.
- i. The affected boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for CO (Condition 7.1.4(d)) State Rule Requirements because the affected boilers do not use an add-on control device to achieve compliance with an emission limitation or standard.
- j. The affected boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for the emission standards set forth in Section 6.5 for mercury, filterable PM, total non-Hg HAP metals, individual non-Hg HAP metals, or Acid Gases, pursuant to 40 CFR 64.2(b)(1)(i), because the affected boilers are subject to emission limitations or standards proposed by the Administrator after November 15, 1990, i.e. 40 CFR Part 63, Subpart UUUUU.
- k. Pursuant to 35 IAC 217.342(b), the affected boilers are not subject to 35 IAC 217 Subpart M, Electrical Generating Units, because the Permittee is complying with 35 IAC 225 Subpart B through the multi-pollutant standard. (See Condition 6.4.2)

7.1.6-1 Intentionally Blank

7.1.6-2 Work Practices

- a.
 - i. As part of its operation and maintenance of the affected boilers, the Permittee shall perform a combustion evaluation on each affected boiler at least semi-annually, pursuant to Section 39.5(7)(d) of the Act. This evaluation shall consist of process measurements of the concentration of CO in the flue gas of the affected boiler, as well as any adjustments and/or corrective measures undertaken for the combustion systems of the boiler.
 - ii. In a semi-annual period for which the Permittee conducts a tune-up of the EGU burner and combustion controls as specified in Condition 6.5.3(e), such tune-up will fulfill the requirement in Condition 7.1.6-2(a)(i) for that period.
 - iii. Notwithstanding Condition 7.1.6-2(a)(i), if an affected boiler is off-line during the last 30 days of the semi-annual period, the Permittee shall perform the required combustion evaluation for such period not later than 30-

boiler operating days after the restart of the boiler.

- b. Pursuant to 35 IAC 214.161(b)(1) and (2) and 214.162, if an affected boiler is burning liquid fuel,
 - i. The sulfur content of all residual fuel oil used by the affected boiler must not exceed 1000 ppm.
 - ii. The sulfur content of all distillate fuel oil used by the affected boiler must not exceed 15 ppm.

7.1.7 Testing Requirements

Pursuant to Section 39.5(7)(d)(ii) of the Act, the Permittee shall have the PM and CO emissions of the affected boiler measured as specified below:

- a.
 - i. PM emission measurements shall be made no later than one year after, and no earlier than one year before, the effective date of this condition.
 - ii. Intentionally Blank
 - iii. Periodic PM emission measurements shall be made for the affected boilers within a time period determined from the compliance margin for the applicable PM emission standard, based on the results of the preceding PM measurement, as follows. For the purpose of this provision, the compliance margin is the extent to which the actual PM emissions as measured are lower than the applicable PM limit. For example, if the measured PM emissions of affected boiler 3 are 0.08 lb/mmBtu, the compliance margin for the applicable PM limit, 0.1 lb/mmBtu, would be 20 percent. ($0.1 - 0.08 = 0.02$, $0.02/0.1 = 0.20$ or 20 percent)
 - A. If the compliance margin is less than 20 percent, within 15 months of the previous measurement.
 - B. If the compliance margin is between 20 and 40 percent, within 27 months of the previous measurement.
 - C. If the compliance margin is greater than 40 percent, within 39 months of the previous measurement.
 - iv. Measurements of CO emissions shall be made as follows:
 - A. In conjunction with the initial measurements of PM emissions as required by Condition 7.1.7(a)(i), if a measurement of CO emissions is not otherwise performed earlier in conjunction with a relative accuracy test audit (RATA) for SO₂ or NO_x conducted under this permit.

- B. In conjunction with each subsequent measurement of PM emissions made pursuant to Condition 7.1.7(a)(iii) (or a RATA for SO₂ or NO_x preceding such measurement), provided, however, that if measured CO emissions are no more than 100 ppm at 50 percent excess air, CO measurements need not be performed with the next PM measurement (or preceding RATA) but shall be performed with the second measurement of PM emissions following the measurement in which CO emissions were no more than 100 ppm (or a RATA preceding that PM measurement).
- v. Intentionally Blank
- vi. A. If alternative fuel (i.e., any fuel other than coal, fuel oil, or gas) is greater than 3.0 percent by weight of the fuel burned in a boiler during a calendar quarter, unless measurements for PM and CO emissions have already been conducted while burning alternative fuel at a percentage that is greater than or equal to the percent of those materials burned in that calendar quarter or at the maximum rate at which the systems that feed alternative fuel to the boiler will be operated, the Permittee shall have measurements of PM and CO emissions from the boiler made during the next calendar quarter in which alternative fuel is burned in the boiler. Notwithstanding Condition 5.9, this condition shall take effect after the first complete quarter following the effectiveness of this condition.
- B. The Permittee shall conduct such measurements while firing the boiler at the lower of the following: (i) at least 1.25 times the percentage of alternative fuel in the calendar quarter that triggered the testing; or (ii) at the maximum rate at which the systems that feed alternative fuel to the boiler will be operated. If the boiler has been burning a mix of alternative fuel materials, the mix of fuel during such measurements shall be approved by the Illinois EPA.
- C. The Permittee shall repeat such measurements if the percentage of alternative fuel materials burned in a boiler during a quarter is more than the percentage of such materials being burned in the boiler when previous emission measurements were conducted.
- vii. Measurements of PM and CO emissions shall be made within 90 days (or such later date set by the Illinois EPA) following a request by the Illinois EPA for such measurements.

- b.
 - i. The Permittee shall operate each affected boiler at maximum normal operating load conditions during each performance test. Maximum normal operating load will be generally between 90 and 110 percent of design capacity but should be representative of unit specific normal operations during each test run, pursuant to 39.5(7)(c) and consistent with 40 CFR 63.10007(a)(2). In addition, the Permittee may perform measurements at other operating conditions to evaluate variation in emissions.
 - ii. Measurements shall be taken at an appropriate location in the ductwork or stack associated with the affected boiler.
 - iii. The following Reference Methods and procedures shall be used for these measurements. Refer to 40 CFR 60, Appendix A for USEPA Methods.

Location of Sample Points	Reference Method 1
Gas Flow and Velocity	Reference Method 2
Flue Gas Weight	Reference Method 3
Moisture	Reference Method 4
Particulate Matter (PM)	Reference Method 5
Carbon Monoxide (CO)	Reference Method 10

Other test methods adopted by USEPA may be used in place of the above methods with the approval of the Illinois EPA.

- c. Except for minor deviations in test methods, as defined by 35 IAC 283.130, emission testing shall be conducted in accordance with a test plan prepared by the testing service or the Permittee and submitted to the Illinois EPA for review prior to emission testing, and the conditions, if any, imposed by the Illinois EPA as part of its review and approval of the test plan, pursuant to 35 IAC 283.220 and 283.230.
 - i. The Permittee shall submit this test plan within the time period provided in Condition 8.6.2 and the test plan shall include the information specified by Condition 8.6.2.
 - ii. Notwithstanding the above, as provided by 35 IAC 283.220(d), the Permittee need not submit a test plan for emission testing that will be conducted in accordance with the procedures used for previous tests accepted by the Illinois EPA or the previous test plan submitted to and approved by the Illinois EPA, provided that the Permittee's notification for testing, as required below, contains the information specified by 35 IAC 283.220(d)(1)(A), (B) and (C).
- d. The Permittee shall notify the Illinois EPA prior to conducting emission tests to enable the Illinois EPA to observe testing. Notification for the expected test date

shall be submitted a minimum of 30 days prior to the expected date of testing. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual test date. The Illinois EPA may on a case-by case basis accept shorter advance notice if it would not interfere with the Illinois EPA's ability to observe testing.

- e. The Permittee shall submit the Final Report(s) for any required emission testing to the Illinois EPA within 45 days after the test results are compiled and finalized but no later than 120 days after the date of testing. The Final Report shall include the information specified in Condition 8.6.3 and the following information:
 - i. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.
 - ii. A description of any minor deviations from the test plan, as provided by 35 IAC 283.230(a).
 - iii. Detailed description of operating conditions during testing, including:
 - A. Source(s) of fuel and specifications (ash, sulfur, heat content).
 - B. Boiler operating information, i.e., firing rate of the affected boiler(s) (mmBtu/hr), composition of fuel as burned (ash, sulfur and heat content), and fuel blending ratio (%), if a blend of fuels is burned.
 - C. Combustion system information, i.e., level of excess air in the flue gas, and levels of CO, CO₂ or O₂ in the flue gas.
 - D. Control equipment operating parameters during testing.
 - E. Load during testing (gross megawatt output and steam flow).
 - F. Information on the usage of alternative fuel during testing, if testing was conducted to satisfy Condition 7.1.7(a)(vi).
 - iv. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
 - v. The SO₂, NO_x, O₂, or CO₂ (hourly averages) and opacity data (6-minute averages) measured during testing.

7.1.8 Monitoring Requirements

- a. Pursuant to 40 CFR 75.14 and Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, operate, calibrate and maintain continuous monitoring equipment for the measurement of opacity from the affected boilers.
 - i. The Permittee shall operate this equipment in accordance with the general provisions for opacity monitoring systems in 40 CFR 75.10.
 - ii. These monitors shall be the primary basis for reporting of exceedances of Condition 5.2.2(b). (See Conditions 7.1.10-2(a) and 7.1.10-3(a).)
- b. Pursuant to 40 CFR 75.11 and Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, operate, calibrate and maintain continuous emission monitoring systems (CEMS) for the measurement of SO₂ emissions from the affected boilers.
 - i. These CEMS shall be used to demonstrate compliance with the limits in Condition 7.1.4(c) based on the average hourly SO₂ emission rate determined from monitored data from three-hour block averaging periods.
- c. Pursuant to 40 CFR 75.12, 35 IAC 217.710(a), and Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, calibrate, maintain and operate CEMS for the measurement of NO_x emissions from the affected boilers, in accordance with the requirements of 40 CFR 75 Subpart B.
- d. Pursuant to Section 412 of the Clean Air Act and 40 CFR Part 75, the source is required to operate continuous monitors for the affected boilers for various parameters, including SO₂, NO_x, volumetric flow and opacity, along with a computerized data acquisition and handling system for collected data. (See also Condition 6.2.3) To the extent that applicable performance specifications and operating requirements for monitoring under 40 CFR Part 75 are inconsistent with the above requirements for monitoring, the procedures of 40 CFR Part 75 shall take precedence. (See also Condition 8.2.)
- e. Compliance Assurance Monitoring (CAM) Requirements

The affected boilers are subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM for the standards set forth in Condition 7.1.4(b) as addressed in Condition 7.1.13.
- f. Pursuant to Construction Permits 08020075 and 07110065, the Permittee shall operate and maintain continuous monitoring equipment to measure the following operating parameters for each baghouse system when the associated boiler is in operation:
 - i. The pressure drop across each baghouse (hourly average). [T1]

- g. Pursuant to Construction Permits 08020075 and 07110065, the Permittee shall operate and maintain continuous monitoring equipment for operation of each sorbent injection system, i.e. rate of injection of sorbent, when the associated boiler is in operation. [T1]

7.1.9 Recordkeeping Requirements

a. Operational Records for the Affected Boilers

Pursuant to Sections 39.5(7)(a) and (e) of the Act, the Permittee shall maintain the following operational records for the affected boilers:

- i. A. Load (in terms of either gross megawatts output or steam flow) on an hourly basis for each affected boiler.
- B. If the Permittee is relying on data for heat input for purposes of compliance with an applicable standard identified or cross-referenced in Condition 7.1.4 that is different from that recorded pursuant to the federal Acid Rain Program, records of heat input (mmBtu, on an hourly basis) or the conversion factors that the Permittee relies upon to convert from boiler load as recorded above to hourly heat input.
- ii. Records for each day when an alternative fuel, (i.e., a fuel other than coal, gas or oil) was burned, including the estimated amount of each such material burned and the affected boiler(s) in which it was burned.
- iii. Total operating hours (hours/quarter) for each the affected boiler.
- iv. A. Amount of coal consumed (tons/quarter).
- B. Amount of each alternative fuel consumed (tons, gallons, cubic feet per quarter, as appropriate).
- v. A. Records of agreements with suppliers of alternative fuel(s), including origin of material, specifications for heat and ash content, and representative data for elemental composition of such material, including mercury and other heavy metals, chlorine and fluorine.
- B. Records for each load of such fuel(s) received at the source, which shall include date, supplier name, type of fuel and amount (tons).
- vi. Operating records, maintenance and repair records, or other records for each affected boiler documenting the performance of the combustion evaluation required by

Condition 7.1.6-2(a), including the date of the evaluation, the concentrations of CO measured at the start and conclusion of the evaluation, and a description of any adjustments and/or corrective measures undertaken for the combustion systems of the boiler.

- vii. In addition, pursuant to 35 IAC 214.161(b)(3)(A), records demonstrating that any fuel oil used by each affected boiler complies with the requirements in Condition 7.1.6-2(b), such as records from the fuel supplier indicating the sulfur content of the fuel oil.

b. Records for Control Equipment

Pursuant to Sections 39.5(7)(a) and (e) of the Act, the Permittee shall maintain the following records for the control devices and air pollution control equipment on the affected boilers:

i. Maintenance and Repair Record

A maintenance and repair record for each control device, which shall list the activities performed, with date and description. (See Condition 9.6.1, Control Equipment Maintenance Records.)

ii. Selective Catalytic Reduction (SCR) Systems

A. Manufacturer/vendor or Permittee developed operating and maintenance procedures.

B. Operating records, including identification of system settings.

Note: These records need to be maintained only during periods when the Permittee operates this system, which is operated at its discretion as needed to comply with applicable requirements.

C. The maintenance and repair records for the SCR systems shall also address activities related to the SCR catalyst, including addition or replacement of catalyst.

D. Usage of reagent (tons/month).

iii. Electrostatic Precipitators (ESPs)

When an affected boiler served by an ESP is in operation:

A. The status of each field in the ESP shall be recorded at least once per shift.

- B. The following numerical data shall be recorded at least once per day: (1) Primary voltages and currents; and (2) Secondary voltages and currents.

iv. Baghouse Systems

Records for each baghouse system that:

- A. Identify the trigger for bag cleaning, e.g., manual, timer, or pressure drop;
- B. Identify each period when the associated boiler was in operation and the baghouse system was not being operated or was not operating effectively; and
- C. Identify each period when any baghouse module(s) have been taken out of regular service, with the identity of the module(s) and explanation.

v. SO₂ Control Systems

Records for each scrubber system that identify each period when the associated boiler was in operation and associated scrubber system was not being operated or was not operating effectively.

vi. ACI Systems

Records of sorbent feed rate and the operational status of the sorbent injection system.

c. Records for Continuous Opacity Monitoring Systems

Pursuant to Section 39.5(7)(e) of the Act, the Permittee shall maintain records for the opacity monitoring system on the affected boilers required by Condition 7.1.8(a) that shall include the following:

- i. Operating records for each opacity monitoring system, including:
 - A. Opacity measurements (6-minute, one-hour and three-hour block averages).
 - B. Performance testing measurements and evaluations, calibration checks, and other quality assurance/control activities.
 - C. Maintenance and adjustment performed.
 - D. Periods other than performance of quality assurance, calibration, and maintenance, as addressed above, when the monitor was inoperative, with reason.

- E. Quarterly reports submitted in accordance with Condition 7.1.10-2(d).
- ii. Records to address compliance with Condition 5.2.2(b) including:
 - A. Each period when the opacity exceeded 30 percent on a 6-minute block average, with date, time, whether it occurred during startup, malfunction/breakdown, or shutdown, and further explanation of the incident. (See Conditions 7.1.9(g) and (h))
- d. Records for Continuous SO₂ Monitoring Systems

Pursuant to Section 39.5(7)(e) of the Act, the Permittee shall maintain records for the SO₂ CEMS on the affected boilers required by Condition 7.1.8(b) that shall include the following:

 - i. Operating records for each SO₂ CEMS, including:
 - A. SO₂ emission data in the units of the applicable standard (lbs/hour and lbs/mmBtu).
 - B. Performance testing measurements and evaluations, calibration checks, and other quality assurance/control activities.
 - C. Maintenance and adjustments performed.
 - D. Periods when the SO₂ CEMS was inoperative, with date, time and reason.
 - E. Data reduction information.
 - F. Quarterly reports submitted in accordance with Condition 7.1.10-2(b).
 - ii. Records to verify compliance with the limitations of Condition 7.1.4(c), including the following:
 - A. SO₂ emissions in the terms of the applicable standard (lbs/hr and lbs/mmBtu) from the affected boiler on an hourly basis, as derived from the data obtained by the SO₂ CEMS.
 - B. The date and time of any three-hour block averaging period when the total SO₂ emission rate, as recorded above, exceeded 101,966 lb/hour, in the aggregate, or 6 lbs/mmBtu, individually, as allowed by Condition 7.1.4(c), with the calculated SO₂ emission rate. These records shall be prepared from the above records at least quarterly as needed to verify compliance with the limitations of Condition 7.1.4(c).

iii. The Permittee shall record for each hour the information required by 40 CFR 75.57(c) for each affected boiler.

e. Records for Continuous NOx Monitoring

Pursuant to Section 39.5(7)(e) of the Act and 35 IAC 217.712 (a), the Permittee shall maintain records for the NOx CEMS on the affected boilers required by Condition 7.1.8(c) in accordance with the applicable recordkeeping requirements of 40 CFR 75, that shall include the following:

i. Operating records for each NOx CEMS, including:

- A. NOx emission data in the units of the applicable standards (lbs/mmBtu).
- B. Performance testing measurements and evaluations, calibration checks, and other quality assurance/control activities.
- C. Maintenance and adjustments performed.
- D. Periods when the CEMS was inoperative, with date, time and reason.
- E. Data reduction information.
- F. Quarterly reports submitted in accordance with Condition 7.1.10-2(c).

ii. Records to verify compliance with the NOx limitations of Condition 7.1.4(f), including:

- A. NOx emissions in terms of the applicable standard (lbs/mmBtu and tons/year) from each affected boiler on an hourly and an annual basis, as derived from the data obtained by the NOx CEMS.

iii. The Permittee shall record the applicable information required by 40 CFR 75.57(d) for NOx emissions for each affected boiler.

f. Acid Rain Program

Records for the continuous emission monitoring required for the affected boilers by the Acid Rain Program should be kept by the Permittee in accordance with 40 CFR Part 75, including the General Recordkeeping Provisions; the General Recordkeeping Provisions for Specific Situations, if applicable; and Certification, Quality Assurance and Quality Control Record Provisions. [See Condition 6.2.3]

g. Records for Startups of Affected Boilers, pursuant to Section 39.5(7)(b) of the Act

- i. The Permittee shall maintain written startup procedures for the affected boilers, as required by Condition 7.1.3(b)(ii).
- ii. The Permittee shall maintain the following records related to startups of an affected boiler:
 - A. For all startups on each affected boiler:
 - I. Date, time, and duration of the startup.
 - II. A description of the startup, the reason(s) for the startup, and an indication of whether or not written startup procedures were followed. If any procedures were not followed, the records shall include any departures from those procedures and the reason those procedures could not be followed.
 - B. For each startup of an affected boiler where an exceedance of a relevant standard occurred during startup or the Permittee believes that compliance with the PM standard likely was not maintained during the startup, maintain the following additional records for such startup.
 - I. An explanation of the nature of such exceedance(s), including the qualitative or, if available, quantitative magnitude of such excess emissions.
 - II. A description of the actions taken or to be taken to minimize the magnitude and duration of any excess emissions.
 - III. An explanation whether similar incidents could be prevented in the future and if so, a description of the actions taken or to be taken to prevent similar incidents in the future.
 - C. For each startup when the duration of startup from initial firing of fuel to stable operation of the generating unit at load exceeded 19 hours for Boiler 1, 16 hours for Boiler 2, or 16 hours for Boiler 3, maintain the following additional records for such startups.
 - I. A description of the events that led up to the extended startup duration and reason(s) for the extended startup duration.
 - II. The actions taken to minimize emissions and the duration of the startup.

III. An explanation whether similar incidents might be prevented in the future and if so, the corrective actions taken or to be taken to prevent similar incidents.

h. Records for Continued Operation During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (e) of the Act, the Permittee shall maintain the following records related to malfunction and breakdown of the affected boilers:

- i. Maintenance and repair records for the affected boilers that address aspects or components of the boilers for which malfunction or breakdown has resulted in excess emissions, which shall list the activities performed on such aspects or components, with date, description and reason for the activity. In addition, in the maintenance and repair records for control equipment required by Condition 7.1.9(b)(i), the Permittee shall also list the reason for the activities that are performed.
- ii. Records for each incident when operation of an affected boiler continued with excess opacity or emissions during malfunction or breakdown as addressed by Condition 7.1.3(c), that shall include the following information:
 - A. Date, time, duration (i.e., the length of time during which operation continued with excess opacity or emissions until corrective actions were taken or the boiler was taken out of service), and description of the incident.
 - B. The corrective actions used to reduce the quantity of emissions and to reduce the duration of the incident.
 - C. Confirmation of fulfillment of the reporting requirements of Condition 7.1.10-3(a), as applicable, including copies of any follow-up reports submitted pursuant to Condition 7.1.10-3(a)(ii).
 - D. If opacity during the incident exceeded the applicable standard, as listed in Condition 5.2.2(b), for two or more hours, PM or CO emissions exceeded an applicable hourly standard, as listed in Condition 7.1.4(b) or (d), or the Permittee believes that compliance with the PM standard, as listed in Condition 7.1.4(b), likely was not maintained:

I. A detailed explanation of

1. Why continued operation of the affected boiler was necessary, and
 2. The probable cause of the incident.
- II. The preventative measures that have been or will be taken to prevent similar incidents or reduce their frequency and severity, including any repairs to the affected boilers and associated equipment and any changes to operating and maintenance procedures.
- E. If PM emissions during the incident exceeded an applicable hourly standard, as listed in Condition 7.1.4(b), or the Permittee believes that compliance with the PM standard likely was not maintained, estimates of the magnitude of emissions of PM during the incident, with magnitude estimates on a qualitative or, if available, quantitative basis.
- F. If CO emissions during the incident exceeded an applicable hourly standard, as listed in Condition 7.1.4(d), estimates of the magnitude of emissions of CO during the incident, with magnitude estimated on a qualitative or, if available, quantitative basis.
- i. Records for Continuous Monitoring Systems
- i. Monitoring Plans
- A. Pursuant to 40 CFR 75.53(a)(2), the Permittee shall prepare and maintain a monitoring plan for each continuous emissions or opacity monitoring system. The monitoring plan shall contain sufficient information on the continuous emission or opacity monitoring system to demonstrate that all unit SO₂ emissions, NO_x emissions, CO₂ emissions, and opacity are monitored and reported.
- B. Pursuant to 40 CFR 75.53(b), whenever the Permittee makes a replacement, modification, or change in the certified CEMS or continuous opacity monitoring system, including a change in the automated data acquisition and handling system or in the flue gas handling system, that affects information reported in the monitoring plan, then the Permittee shall update the monitoring plan.
- C. Pursuant to 40 CFR 75.53(e), each monitoring plan shall contain the information specified in 40 CFR 75.53(e)(1) in electronic format and the information specified in 40 CFR 75.53(e)(2) in hardcopy format. Electronic storage of all monitoring plan information, including the hardcopy portions, is permissible provided that a

paper copy of the information can be furnished upon request for audit purposes.

ii. General recordkeeping provisions

- A. Pursuant to 40 CFR 75.57(a), the Permittee shall maintain for each affected boiler records of all continuous monitoring system measurements, data, reports, and other information required by 40 CFR Part 75 at the source in a form suitable for inspection for at least three (3) years from the date of each record.
- B. Pursuant to 40 CFR 75.57(b), the Permittee shall record for each affected boiler hourly information on unit operating time, heat input rate, and load, as specified at 40 CFR 75.57(b)(1) through (7).

7.1.10-1 Reporting Requirements - Reporting of Deviations

a. Prompt Reporting of Deviations

For each affected boiler, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as specified below. These notifications shall include a description of such deviations, including whether they occurred during startup or malfunction/breakdown, and a discussion of the probable cause of such deviations, any corrective actions taken and any preventative measures taken. [Section 39.5(7)(f)(ii) of the Act]

- i. For those breakdown or malfunction PM or opacity events that require notification and reporting pursuant to Condition 7.1.10-3(a), notification and reporting shall be provided pursuant to Condition 7.1.10-3(a) rather than Condition 7.1.10-2(d).
- ii. Notification with the quarterly or annual reports required by Conditions 7.1.10-2(a) and (f) for deviations from Conditions 5.2.2(b), 7.1.4(b), (c) and (f) and from the requirements of Condition 7.1.8 for emissions monitoring, unless notification and reporting for that deviation is required pursuant to Condition 7.1.10-3(a).
- iii. Notification with the quarterly reports required by Condition 7.1.10-2(a) for deviations from the work practice requirements and recordkeeping requirements.
- iv. In addition, pursuant to 35 IAC 214.161(b)(3)(C), notification within 30 days after discovery of deviations from any of requirements of Condition 7.1.6-2(b).

b. Periodic Reporting of Deviations

The quarterly reports required by Condition 7.1.10-2(a) shall include the following information for the affected boilers related to deviations from permit requirements during the quarter. [Section 39.5(7)(f)(i) of the Act]

- i. A listing of all notifications and reports for instances of deviations that have been provided in writing to the Illinois EPA pursuant to Condition 7.1.10-3(a). For this purpose, the Permittee need not resubmit copies of these previous notifications or reports but may elect to supplement such material.
- ii. Detailed information, as required by Condition 7.1.10-1(a)(ii) or (iii), for all other deviations not addressed in the above listing.

7.1.10-2 Reporting Requirements - Periodic Reporting

a. Quarterly Reports

In place of the semi-annual monitoring reports otherwise required by Condition 8.6.1, the Permittee shall submit quarterly reports to the Illinois EPA pursuant to Sections 39.5(7)(a) and (f) of the Act.

- i. These reports shall include the following information for operation of each affected boiler during the quarter:
 - A. The total operating hours for each affected boiler, as also reported in accordance with 40 CFR Part 75.
 - B. The greatest hourly load achieved by each affected boiler (steam flow or gross megawatts).
 - C. A discussion of significant changes in the fuel supply to the affected boilers, if any, including changes in the source of coal, the introduction of new fuel materials other than coal, gas and oil, and changes in the source of such other fuel materials or the maximum rate at which they will be fired.
 - D. Intentionally Blank
 - E. A list of the startups of each affected boiler, including the date, duration and description of each startup, accompanied by a copy of the records maintained pursuant to Condition 7.1.9(g)(ii)(C) for each startup for which such records were required.
- ii. These reports shall include the information specified in Conditions 7.1.10-2(b), (c) and (d) for SO₂, NO_x, and PM emissions and opacity from the affected boilers during

the quarter and for the operation of required continuous monitoring systems during the quarter.

- iii. A. These reports shall be submitted after the end of every calendar quarter as follows, except as provided for in Condition 7.1.10-2(a)(iii)(B):

Monitoring Period	Submittal Deadline
January - March	May 15
April - June	August 15
July - September	November 15
October - December	February 15

- B. Notwithstanding the above, the first quarterly report required pursuant to this permit shall be submitted in accordance with Condition 5.9(f) and the next three quarterly reports shall be submitted no later than 60 days after the end of each calendar quarter.

b. Reporting of SO₂ Emissions

Pursuant to Sections 39.5(7)(a) and (f) of the Act, the Permittee shall report the following information for each affected boiler to the Illinois EPA with its quarterly reports pursuant to Condition 7.1.10-2(a):

- i. Summary information on the performance of the SO₂ CEMS, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the SO₂ CEMS was not inoperative, repaired or adjusted, such information shall be stated in the report as specified by 40 CFR 60.7(c)(4).
- ii. If specifically requested by the Illinois EPA or the SO₂ CEMS downtime was more than 5 percent of the total operating time for the affected boiler during the quarter: the date and time identifying each period during which the CEMS was inoperative except for zero and span checks and the nature of CEMS repairs or adjustments; and a summary of quality assurance data consistent with 40 CFR Part 75, i.e., the dates and results of the Linearity Test(s) and any Relative Accuracy Test Audit(s) during the quarter, a listing of any days when a required daily calibration was not performed, and the date and duration of any periods when the CEMS was "out-of-control" as addressed by 40 CFR 75.24.
- iii. Intentionally Blank
- iv. The following information for each period when SO₂ emissions were in excess of an applicable standard

specified in Condition 7.1.4(c)*. When there were no such exceedances, this shall be stated in the report.

- A. The starting date and time of the SO₂ excess emissions.
- B. The duration of the excess emissions.
- C. The one-hour and three-hour average SO₂ emission rates (lbs/hour and/or lbs/mmBtu) for each three-hour block of excess emissions.
- D. A detailed explanation of the cause of the excess emissions if known, including whether such excess emissions occurred during startup, malfunction or breakdown of the boiler.
- E. A detailed explanation of any corrective actions taken.

* For SO₂ emissions, the averaging period is a three-hour block average, as used to determine compliance with the limitations of Condition 7.1.4(c). The records for excess emissions shall consist of any three-hour block emission averages during which the limitations were exceeded.

c. Reporting of NO_x Emissions

Pursuant to Sections 39.5(7)(a) and (f) of the Act, the Permittee shall report the following information for each affected boiler to the Illinois EPA with its quarterly reports pursuant to Condition 7.1.10-2(a):

- i. Summary information on the performance of the NO_x CEMS, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the NO_x CEMS was not inoperative, repaired or adjusted, such information shall be stated in the report as specified by 40 CFR 60.7(c)(4).
- ii. If specifically requested by the Illinois EPA or the NO_x CEMS downtime was more than 5 percent of the total operating time for the affected boiler during the quarter: the date and time identifying each period during which the CEMS was inoperative except for zero and span checks and the nature of CEMS repairs or adjustments; and a summary of quality assurance data consistent with 40 CFR Part 75, i.e., the dates and results of the Linearity Test(s) and any Relative Accuracy Test Audit(s) during the quarter, a listing of any days when a required daily calibration was not performed, and the date and duration of any periods when the CEMS was "out-of-control" as addressed by 40 CFR 75.24.

d. Reporting of Opacity and PM Emissions

Pursuant to Sections 39.5(7)(b) and (f) of the Act, the Permittee shall report the following information for each affected boiler to the Illinois EPA with its quarterly report pursuant to Condition 7.1.10-2(a):

- i. Information on the performance of the opacity monitoring system and excess emissions, as required for a "Summary Report" as specified by 40 CFR 60.7(d). Additionally, the quarterly report shall also include:
 - A. The total operating time of each affected boiler; and
 - B. The operating status of the opacity monitoring system, including the dates and times of any periods during which it was inoperative except for zero and span checks.
- ii. When no excess opacity occurred or the continuous opacity monitoring system has not been inoperative, repaired or adjusted, such information shall be stated in the report as specified by 40 CFR 60.7(c)(4).
- iii. The following information for each period when opacity exceeded 30 percent, based on a six-minute block average:
 - A. A summary of information for each period of excess opacity that includes:
 - I. The starting date and time of the excess opacity.
 - II. The duration of the excess opacity.
 - III. The magnitude of excess opacity, based on six-minute average opacity, including:
 - a. The percent opacity for each six-minute period in excess of the applicable standard.
 - b. The start time of each six-minute period in excess of the applicable standard.
 - IV. The cause of excess opacity, if known, including whether such excess opacity occurred during startup, malfunction or breakdown of the boiler.
 - V. Any corrective actions taken.

- VI. Identification of any previous report for the incidents during the quarter submitted to the Illinois EPA pursuant to Condition 7.1.10-3(a)(ii). For this purpose, the Permittee need not resubmit copies of such report but may elect to supplement such material.
- VII. Information required by Condition 7.1.9(h)(ii)(A), (B), and (D)(I) for incidents when operation of the affected boiler continued during malfunction or breakdown with excess opacity that are not addressed by individual reports submitted pursuant to Condition 7.1.10-3(a)(ii).

Note: Because the Permittee is reporting in accordance with the requirements of the NSPS, 40 CFR 60.7(c) and (d) for the affected boilers for opacity, pursuant to the federal Acid Rain program, as included above, the Permittee is not subject to reporting pursuant to 35 IAC 201.405 [35 IAC 201.403(a)].

- iv. The following information for periods when PM emissions were in excess of the limitation in Condition 7.1.4(b). If there were no such periods of excess emissions during the reporting period, the quarterly report shall so state.
 - A. A summary of information for each period of excess emissions that includes:
 - I. The starting date and time of the excess emissions.
 - II. The duration of the excess emissions.
 - III. The qualitative or, if available, quantitative magnitude of the excess emissions.
 - IV. The means by which the excess emissions were indicated or identified, if other than the level of opacity.
 - V. A detailed explanation of the cause of the excess emissions, if known, including whether such excess emissions occurred during startup, malfunction or breakdown.
 - VI. A detailed explanation of any corrective actions taken.
 - B. Identification of the previous reports for the incidents submitted to the Illinois EPA pursuant

to Condition 7.1.10-3(a)(ii), if any. For this purpose, the Permittee need not resubmit copies of such report but may elect to supplement such material.

- v. The following further information related to opacity exceedances or groups of opacity exceedances during the quarter that resulted from the same or similar cause(s):
 - A. For opacity exceedances or groups of exceedances with "recurring" cause(s) (i.e., cause(s) that also resulted in exceedances(s) during the previous quarter): an explanation of any particular circumstances or factors during the current quarter that affected the number or magnitude of such exceedances; a discussion of any changes in the corrective actions taken in response to such exceedances during the current quarter as compared to the previous quarter; and a discussion of any additional preventative measures that were taken during the current quarter to reduce the number or magnitude of exceedances.
 - B. For opacity exceedances or groups of exceedances with "new" cause(s) (i.e., cause(s) that did not result in opacity exceedance(s) during the previous quarter): an explanation of the cause(s) or probable cause(s) of such exceedance(s), to the extent known; a discussion of any particular circumstances or factors during the quarter that resulted in such exceedance(s); the corrective actions taken, if any, with explanation of how those actions functioned to end the exceedance(s); and a discussion of any preventive measures taken to reduce the number or magnitude of exceedances.
- vi. A glossary of specialized technical terms commonly used by the Permittee in its reports pursuant to this Condition 7.1.10-2(d).

e. Acid Rain Program Reporting

Pursuant to Section 412 of the Clean Air Act and 40 CFR Parts 72 and 75, the source is subject to the reporting requirements of 40 CFR Part 75, which includes General Provisions; Notifications; Initial Certification or Recertification Application; Quarterly Reports; and Opacity Reports. [See Condition 6.2.3] Pursuant to Section 39.5(17)(m) of the Act, the designated representative of the source must concurrently submit to the Illinois EPA in the same electronic format specified by the USEPA, the data and information submitted to USEPA on a quarterly basis pursuant to 40 CFR 75.64.

f. Reporting of NOx Emissions for the Ozone Control Period

The Permittee shall submit a report to the Illinois EPA by November 30 of each year that demonstrates whether the affected boilers have complied with Condition 7.1.4(f), pursuant to 35 IAC 217.712(d) and (e).

- i. If the Permittee is demonstrating compliance on a unit-specific basis with Condition 7.1.4(f)(i)(A), this report shall contain the information specified by 35 IAC 217.712(d) including the heat input and NOx emissions of the units for the ozone control period.
- ii. If the Permittee is demonstrating compliance by means of "NOx averaging" as authorized by Condition 7.1.4(f)(i)(B), this report shall contain the information specified by 35 IAC 217.712(e) and other related information as follows:
 - A. In all cases, for each affected boiler covered by this permit that is participating in a NOx averaging demonstration, the Permittee shall report the following:
 - I. Identification of the other EGUs that are participating in the demonstration, including identification of the source that is the lead party for the demonstration and that is also taking responsibility for submitting the information required by Condition 7.1.10-2(f)(ii)(B) below.
 - II. A statement confirming that the unit is eligible to participate in an averaging demonstration, i.e., the unit is included in only one demonstration [35 IAC 217.708(d)] and the Permittee is complying with applicable recordkeeping and reporting requirements for the unit, pursuant to 35 IAC 217.708(c) and (g).
 - III. The average NOx emission rate for the unit, with calculations and supporting information, as required by 35 IAC 217.712(e)(2) and (3), including the heat input and NOx emissions of the unit for the ozone control period.
 - IV. A statement whether the unit would show compliance on its own in the absence of averaging.
 - B. If the Permittee is the lead party for a NOx averaging demonstration that includes units operated by other companies, the Permittee shall report the following:

- I. Copies of the information provided by other parties to the lead party for the EGU(s) participating in the demonstration, which include all material required by Condition 7.1.10-2(f)(ii)(A) above (unless or except as this information is provided with the submittal by a person who is a responsible official for the EGU participating in the demonstration).
- II. The averaged NOx emission rate for all EGUs participating in the demonstration, with complete supporting calculations, as required by 35 IAC 217.712(e)(1).
- III. A statement whether the demonstration shows compliance.

- g. Submittal of Supplemental Information Related to NOx Emissions during the Ozone Control Period

The Permittee shall submit copies of any records and data required by 35 IAC 217.712 to the Illinois EPA within 30 days after receipt of a written request by the Illinois EPA. [35 IAC 217.712(g)]

7.1.10-3 Reporting Requirements - Notifications

- a. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA, Compliance Section and Regional Office, for incidents when operation of an affected boiler continued with excess emissions or excess opacity during malfunction or breakdown as addressed by Condition 7.1.3(c). These requirements do not apply to such excess emissions, if any, that occur during startup or shutdown of an affected boiler.

- i. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile or electronic mail for each incident in which the opacity from an affected boiler exceeds 30 percent for eight or more 6-minute averaging periods within a two-hour period, unless the Permittee has begun the shutdown of the affected boiler by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods within a two-hour period or the Permittee has begun the shutdown of the affected boiler by such time, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.1.10-2(d).)

- ii. Upon conclusion of each incident in which the applicable PM emission standard was exceeded or in which an exceedance of the opacity standard was two hours or more in duration, the Permittee shall submit a follow-up report to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a copy of the records for the incident required by Condition 7.1.9(h)(ii)(A), (B) and (D).

7.1.11 Anticipated Operating Scenarios/Operating Flexibility

The Permittee is authorized to make the following operational changes with respect to each affected boiler without prior notification to the Illinois EPA or revision of this permit, pursuant to Sections 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements; to properly obtain a construction permit in a timely manner for any activity constituting construction or modification as defined in 35 IAC 201.102 or, as applicable, 40 CFR 52.21(a)(2) or 35 IAC 203.207; and to comply with other legal requirements that apply to such a change:

- a. Operation of additional air pollution control equipment, which is addressed by a separate construction permit.
- b. Burning of coal or a mix of coal from different suppliers.
- c. Burning of the following materials in conjunction with burning of standard fuels, provided that such materials can be accommodated with the existing fuel handling system and the burners in the affected boilers, and such materials do not make up more than 10 percent by weight of the fuel supply to the boiler on a quarterly basis:
 - i. Used oil generated at the source.

Note: Other requirements unrelated to air pollution control may apply to burning of alternative fuels, such as Standards for Management of Used Oil, 35 IAC Part 739.

7.1.12 Compliance Procedures

- a. i. Compliance with the opacity limitation of Condition 5.2.2(b) (30 percent opacity) is addressed by the average opacity calculated from six-minute periods of opacity measurements from the continuous opacity monitoring system operated in accordance with the requirements of Condition 7.1.8(a) and the relevant recordkeeping requirements of Condition 7.1.9.
- ii. Notwithstanding Condition 7.1.12(a)(i) above, should the Permittee choose to rely on 35 IAC 212.123(b) to allow opacity greater than 30 percent (6-minute average) from an affected boiler, the Permittee shall do the following:

- A. Maintain records for each affected boiler of short-term opacity data, that is, either a continuous chart recording of measured opacity, a record of discrete measurements of opacity taken no more than 15 seconds apart, or a record of 1-minute average opacity data determined from four or more data points equally spaced during each minute period, to determine whether opacity from the boiler exceeded 30 percent opacity.
 - B. Have the capability to review such short-term opacity data for each affected boiler to identify:
 - I. Any hour in which opacity exceeded 30 percent, and then, for such hour: (1) the duration of opacity in excess of 30 percent; (2) whether opacity ever exceeded 60 percent; and (3) whether the duration of opacity in excess of 30 percent was more than 8 minutes in aggregate.
 - II. Whether opacity in excess of 30 percent occurred in more than three hours in a 24-hour period.
 - C. For other emission units at the source, have the ability to review any opacity data required to be collected and kept pursuant to other provisions of this permit and that is representative of such units.
 - D. In the reports required by Condition 7.1.10-2(d), confirm that the relevant short-term opacity data shows that the terms of 35 IAC 212.123(b) are satisfied, when 35 IAC 212.123(b) is relied upon.
 - E. Notify the Illinois EPA with its next quarterly report if it changes the type of short term opacity data that it is collecting pursuant to Condition 7.1.12(a)(ii)(A) for use in conjunction with reliance on 35 IAC 212.123(b).
- b. Compliance with the PM emission limitations of Condition 7.1.4(b) are addressed by PM testing in accordance with Condition 7.1.7, continuous opacity monitoring in accordance with Condition 7.1.8(a), and the relevant recordkeeping required by Condition 7.1.9.
 - c. Compliance with the SO₂ emission limitations of Condition 7.1.4(c) is addressed by continuous emission monitoring in accordance with Condition 7.1.8(b), and the relevant recordkeeping required by Condition 7.1.9.
 - d. Compliance with the CO emission limitation of Condition 7.1.4(d) is addressed by the required work practices in

Condition 7.1.6-2(a), emission testing in accordance with Condition 7.1.7, and the relevant recordkeeping required by Condition 7.1.9.

- e. Compliance with NOx emission limitations of Conditions 7.1.4(e) and (f) is addressed by the continuous emission monitoring in accordance with Condition 7.1.8(c), and the relevant recordkeeping required by Condition 7.1.9.
- f. Compliance with the work practices required by Condition 7.1.6-2(a) is addressed by the relevant recordkeeping required by Condition 7.1.9.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

7.1.13 Compliance Assurance Monitoring Requirements

- a. Pursuant to 40 CFR 64.7(a), the Permittee shall comply with the following CAM requirements and the requirements in Condition 7.1.13(b) through (e) and Tables 7.1.13-1, 7.1.13-2 and 7.1.13-3.
 - i. Proper Maintenance and Continued Operation
 - A. Pursuant to 40 CFR 64.7(b), at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
 - B. Pursuant to 40 CFR 64.7(c), except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit (PSEU) is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The Permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
 - ii. Response to Excursions

- A. Pursuant to 40 CFR 64.7(d)(1), upon detecting an excursion, the Permittee shall restore operation of the PSEU (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distributed control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- B. Pursuant to 40 CFR 64.7(d)(2), determination of whether the Permittee has used acceptable procedures in response to an excursion will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

b. Recordkeeping

Pursuant to 40 CFR 64.9(b)(1), the Permittee shall maintain records of the monitoring data, monitor performance data, corrective actions taken, monitoring equipment maintenance, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under Conditions 7.1.9(c)(i) or 7.1.13 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

c. Reporting

Pursuant to Sections 39.5(7)(b) and (f) of the Act, the Permittee shall submit the following as part of the Quarterly Monitoring Reports required by Condition 7.1.10-2.

- i. Summary information on the number, duration, and cause of excursions, and the corrective actions taken, pursuant to 40 CFR 64.6(c)(3), 40 CFR 64.9(a)(2)(i), and Condition 7.1.10-2(d)(iv), except as otherwise provided in 40 CFR Part 64, including 64.7(d).

ii. Summary information on the number, duration, and cause for monitoring equipment downtime incidents, other than downtime associated with calibration checks, pursuant to 40 CFR 64.6(c)(3), 40 CFR 64.9(a)(2)(ii), and Condition 7.1.10-2(d)(i) and (ii).

d. Quality Improvement Plans (QIP)

Pursuant to 40 CFR 64.8, based on the results of any future determination made under 40 CFR 64.7(d)(2), the Administrator or the Illinois EPA may require the Permittee to develop and implement a QIP under separate permit action, as appropriate, under Sections 39.5(14), (15), or (16) of the Act.

e. Need for Improved Monitoring

Pursuant to 40 CFR 64.7(e), if the Permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the Illinois EPA within 30 days of identification and, if necessary, submit to the Illinois EPA a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

Table 7.1.13-1 - CAM Plan for Boiler 1 - 35 IAC 212.203

PSEU Designations:	Boiler 1
Pollutant:	Particulate Matter (PM) Emissions
Indicator:	#1) COMS Opacity
General Criteria	
The Monitoring Approach Used to Measure the Indicators:	Opacity is measured using a transmissometer. The transmissometer measures the opaqueness of the flue gas exhaust using a beam of light that traverses the stack diameter, which generates an electrical signal that is proportional to the opacity.
The Indicator Range Which Provides a Reasonable Assurance of Compliance:	An excursion is defined as an event during which a measured opacity exceeds 30 percent, based on a rolling three-hour average of COMS data, excluding those events defined as startup, shutdown or malfunction. The opacity indicator level has been established at a level that provides reasonable assurance that particulate matter emissions are in compliance when opacity is equal to or less than the indicator level.
Quality Improvement Plan (QIP) Threshold Levels:	A QIP is not being considered at the time of this CAM Plan submission. Currently, there is no indication of any deficiencies in the monitoring approach selected. The COMS monitoring requirements provide the specific QA/QC procedures for data collection, recordkeeping and reporting for determining "reasonable" assurance of compliance with the applicable PM limitation.
Performance Criteria	
The Specifications for Obtaining Representative Data:	The COMS are installed at representative locations in the exhaust stack per 40 CFR Part 60, Appendix B, PS-1 requirements.
Verification Procedures to Confirm the Operational Status of the Monitoring:	N/A. The COMS were installed and qualified for use to determine compliance with state opacity standards. Verification Procedures are not necessary.
Quality Assurance and Quality Control (QA/QC) Practices that Ensure the Validity of the Data:	40 CFR Part 60, Appendix B, Performance Specification 1 and 40 CFR Part 75 QA/QC procedures.
The Monitoring Frequency:	Opacity is measured continuously. Opacity data is reduced in accordance with procedures in 40 CFR 60.13.
The Data Collection Procedures That Will Be Used:	The rolling three-hour average is calculated and reported in the CEM Data Acquisition System. Alarm set points are established to alert operators of problems.
The Data Averaging Period for Determining Whether an Excursion Has Occurred:	Rolling three-hour averages

Table 7.1.13-2 - CAM Plan for Boiler 2 - 35 IAC 212.203

PSEU Designations:	Boiler 2	
Pollutant:	Particulate Matter (PM) Emissions	
Indicator:	#1 PM CEMS	#2) COMS Opacity
General Criteria		
The Monitoring Approach Used to Measure the Indicators:	PM is measured with certified CEMS in Boiler 2 stack	Only if the PM CEMS is inoperable, opacity is measured using a transmissometer. The transmissometer measures the opaqueness of the flue gas exhaust using a beam of light that traverses the stack diameter, which generates an electrical signal that is proportional to the opacity.
The Indicator Range Which Provides a Reasonable Assurance of Compliance:	An excursion is defined as an event during which a measured PM emission exceeds 0.18 lbs/mmBtu (i.e., 90% of the 0.20 lbs/mmBtu limit) based on a rolling three-hour average of CEMS data, excluding those events defined as startup, shutdown or malfunction.	An excursion is defined as an event during which a measured opacity exceeds 30 percent, based on a rolling three-hour average of COMS data, excluding those events defined as startup, shutdown or malfunction. The opacity indicator level has been established at a level that provides reasonable assurance that particulate matter emissions are in compliance when opacity is equal to or less than the indicator level.
Quality Improvement Plan (QIP) Threshold Levels:	A QIP is not being considered at the time of this CAM Plan submission. Currently, there is no indication of any deficiencies in the monitoring approach selected. The CEMS monitoring requirements provide the specific QA/QC procedures for data collection, recordkeeping and reporting for determining "reasonable" assurance of compliance with the applicable PM limitation.	A QIP is not being considered at the time of this CAM Plan submission. Currently, there is no indication of any deficiencies in the monitoring approach selected. The COMS monitoring requirements provide the specific QA/QC procedures for data collection, recordkeeping and reporting for determining "reasonable" assurance of compliance with the applicable PM limitation.
Performance Criteria		
The Specifications for Obtaining Representative Data:	The CEMS are installed at representative locations in the exhaust stack per 40 CFR Part 60, Appendix B, PS-11 requirements.	The COMS are installed at representative locations in the exhaust stack per 40 CFR Part 60, Appendix B, PS-1 requirements.
Verification Procedures to Confirm the Operational Status of the Monitoring:	N/A. The CEMS were installed and qualified for use to determine compliance with state PM standards. Verification Procedures are not necessary.	N/A. The COMS were installed and qualified for use to determine compliance with state opacity standards. Verification Procedures are not necessary.

Quality Assurance and Quality Control (QA/QC) Practices that Ensure the Validity of the Data:	40 CFR Part 60, Appendix F, Performance Specification 2	40 CFR Part 60, Appendix B, Performance Specification 1 and 40 CFR Part 75 QA/QC procedures.
The Monitoring Frequency:	PM emission is measured continuously. PM data is reduced in accordance with procedures in 40 CFR 60.13.	Opacity is measured continuously. Opacity data is reduced in accordance with procedures in 40 CFR 60.13.
The Data Collection Procedures That Will Be Used:	The rolling three-hour average is calculated and reported in the CEM Data Acquisition System. Alarm set points are established to alert operators of problems.	The rolling three-hour average is calculated and reported in the CEM Data Acquisition System. Alarm set points are established to alert operators of problems.
The Data Averaging Period for Determining Whether an Excursion Has Occurred:	Rolling three-hour averages	Rolling three-hour averages

Table 7.1.13-3 - CAM Plan for Boiler 3 - 35 IAC 212.203

PSEU Designations:	Boiler 3	
Pollutant:	Particulate Matter (PM) Emissions	
Indicator:	#1) PM CEMS	#2) COMS Opacity
General Criteria		
The Monitoring Approach Used to Measure the Indicators:	PM is measured with certified CEMS in Boiler 3 stack	Only if the PM CEMS is inoperable, opacity is measured using a transmissometer. The transmissometer measures the opaqueness of the flue gas exhaust using a beam of light that traverses the stack diameter, which generates an electrical signal that is proportional to the opacity.
The Indicator Range Which Provides a Reasonable Assurance of Compliance:	An excursion is defined as an event during which a measured PM emission exceeds 0.09 lbs/mmBtu (i.e., 90% of the 0.10 lbs/mmBtu limit) based on a rolling three-hour average of CEMS data, excluding those events defined as startup, shutdown or malfunction.	An excursion is defined as an event during which a measured opacity exceeds 30 percent, based on a rolling three-hour average of COMS data, excluding those events defined as startup, shutdown or malfunction. The opacity indicator level has been established at a level that provides reasonable assurance that particulate matter emissions are in compliance when opacity is equal to or less than the indicator level.
Quality Improvement Plan (QIP) Threshold Levels:	A QIP is not being considered at the time of this CAM Plan submission. Currently, there is no indication of any deficiencies in the monitoring approach selected. The CEMS monitoring requirements provide the specific QA/QC procedures for data collection, recordkeeping and reporting for determining "reasonable" assurance of compliance with the applicable PM limitation.	A QIP is not being considered at the time of this CAM Plan submission. Currently, there is no indication of any deficiencies in the monitoring approach selected. The COMS monitoring requirements provide the specific QA/QC procedures for data collection, recordkeeping and reporting for determining "reasonable" assurance of compliance with the applicable PM limitation.
Performance Criteria		
The Specifications for Obtaining Representative Data:	The CEMS are installed at representative locations in the exhaust stack per 40 CFR Part 60, Appendix B, PS-11 requirements.	The COMS are installed at representative locations in the exhaust stack per 40 CFR Part 60, Appendix B, PS-1 requirements.
Verification Procedures to Confirm the Operational Status of the Monitoring:	N/A. The CEMS were installed and qualified for use to determine compliance with state PM standards. Verification Procedures are not necessary.	N/A. The COMS were installed and qualified for use to determine compliance with state opacity standards. Verification Procedures are not necessary.

Quality Assurance and Quality Control (QA/QC) Practices that Ensure the Validity of the Data:	40 CFR Part 60, Appendix F, Performance Specification 2	40 CFR Part 60, Appendix B, Performance Specification 1 and 40 CFR Part 75 QA/QC procedures.
The Monitoring Frequency:	PM emission is measured continuously. PM data is reduced in accordance with procedures in 40 CFR 60.13.	Opacity is measured continuously. Opacity data is reduced in accordance with procedures in 40 CFR 60.13.
The Data Collection Procedures That Will Be Used:	The rolling three-hour average is calculated and reported in the CEM Data Acquisition System. Alarm set points are established to alert operators of problems.	The rolling three-hour average is calculated and reported in the CEM Data Acquisition System. Alarm set points are established to alert operators of problems.
The Data Averaging Period for Determining Whether an Excursion Has Occurred:	Rolling three-hour averages	Rolling three-hour averages

7.2 Coal Handling Equipment

7.2.1 Description

The Permittee transfers and stores coal in a series of operations, including railcar unloading, various conveyor belts (with associated hoppers, diverters, and transfer points), surge bins, storage piles, and bunkers. These operations include coal handling both before and after the coal is conditioned by the coal processing equipment (See Section 7.3).

Particulate matter (PM) emissions associated with these operations are controlled by various measures such as the moisture content of the coal, enclosures and covers, dust suppression, and dust collection devices.

Note: The description in Condition 7.2.1 is for informational purposes only and implies no limits or constraints.

7.2.2 List of Emission Units

Coal Railcar Unloading
Coal Transfer Conveyors
Coal Storage Piles
Coal Storage Bunkers

7.2.3 Applicability Provisions

- a. The "affected operations" for the purpose of these unit-specific conditions are the emission units that are used solely for the purpose of transferring coal or other solid fuel from one location to another or for storage of coal or other solid fuel, without changing the size of the fuel, e.g., by crushing or screening, as described in Conditions 7.2.1 and 7.2.2.
- b. Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected operation in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123) and Conditions 7.2.4(c) or (d) (35 IAC 212.321(a) or 212.322(a)) in the event of a malfunction or breakdown of an affected operation. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262 as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.
 - i. This authorization only allows such continued operation as related to the operation of the coal-fired boilers as necessary to provide essential service or to prevent

injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.

- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable repair the affected operation, remove the affected operation from service or undertake other action so that excess emissions cease.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Condition 7.2.9(e) and 7.2.10(b). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected operation out of service.
- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.2.4 Applicable Emission Standards

- a. The standard that addresses fugitive emissions, as defined by 35 IAC 211.2490, of the affected operations is set forth in Condition 5.2.2(a).
- b. The standard that addresses the opacity of the emission of smoke or other particulate matter from the affected operations is set forth in Condition 5.2.2(b).
- c. The rotary railcar dumper and associated conveyor shall comply with 35 IAC 212.321(a): "no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission

rates specified in subsection (c) of [35 IAC 212.321]". Each of the two units shall demonstrate compliance individually. (See also Attachment 1.) [35 IAC 212.321(a)].

- d. The affected operations not listed in Condition 7.2.4(c) shall comply with 35 IAC 212.322(a): "no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of [35 IAC 212.322]". Each unit, e.g., each conveyor, shall demonstrate compliance individually. (See also Attachment 2.) [35 IAC 212.322(a)].

7.2.5 Non-Applicability of Regulations of Concern

- a. The affected operations listed below are not subject to 35 IAC 212.321 or 212.322 because of the disperse nature of the operations, as generally addressed by 35 IAC 212.323.
 - i. Coal Storage Piles
- b. The affected operations are not subject to NSPS, "Standards of Performance for Coal Preparation and Processing Plants," 40 CFR 60 Subpart Y, because the affected operations were not constructed, reconstructed or modified after October 24, 1974, or May 27, 2009, as applicable.
- c. The affected operations are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM because the affected operations do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.2.6 Work Practices and Emission Limitations

- a.
 - i. The Permittee shall implement and maintain the control measures for the affected operations, such as the moisture content of the coal, enclosures and covers, dust suppression, and dust collection devices, for emissions of particulate matter to support the periodic monitoring for the applicable requirements in Conditions 7.2.4 and 7.2.6(b), pursuant to Section 39.5(7)(a) of the Act.
 - ii. The control measures implemented and maintained shall be identified and operated in conformance with the "Control Measures Record" required by Condition 7.2.9(b)(i) to satisfy Condition 7.2.6(a)(i), which record is incorporated by reference into this permit by Condition 5.2.8.

- b. i. A. The throughput of the rotary rail car unloading operation shall not exceed 10.0 million tons per year. [T1]

- B. The PM emissions of the following affected operations shall not exceed the following limitations: [T1]

<u>Operation</u>	<u>PM Limitation (Tons/Year)</u>
Rotary Railcar Unloading	15.5
Unloading Conveyor	7.2

- ii. Compliance with annual limitations shall be determined as a running total of 12 months of data, from the sum of the data for the current month plus the preceding 11 months. [T1]

Note: The above requirements and limitations were established in Permit 99020066.

- iii. Pursuant to Construction Permit 00080006, the rail car dumper shall not be operated without either the dry dust collection system or the wet dust suppression system being in operation. [T1]

7.2.7 Opacity Observation Requirements

- a. i. The Permittee shall have the opacity of the emissions from the affected operations during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.
 - A. For each affected operation, observations shall be conducted not later than two years after the effectiveness of this condition.
 - B. Thereafter, for each affected operation, observations shall be conducted every third year.
 - C. Upon written request by the Illinois EPA, such observations shall be conducted for specific affected operation(s) not later than 45 calendar days after the Permittee has received the request or on such later date agreed to by the Illinois EPA.
- ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of

observations (two six-minute averages) are each not greater than 10.0 percent.

- iii. A. For each set of observations required by Conditions 7.2.7(a)(i)(A), (B), and (C), the Permittee shall notify the Illinois EPA at least 7 days in advance of the date of the first observation.
- B. The Permittee shall promptly notify the Illinois EPA of any changes in the date of the first observation.
- iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observation(s), if Illinois EPA personnel are present.
- v. The Permittee shall submit a written report for these observations not later than 30 days after the date of completion of each set of opacity observations required by Conditions 7.2.7(a)(i)(A), (B), and (C). The report shall include a copy of the current Reference Method 9 certification of each observer and shall identify the observer's current employer. This report shall also include the following for each observation:
 - A. Identification of the affected operation for which observations were conducted.
 - B. Date and time of observations.
 - C. Description of observation conditions, including recent weather.
 - D. Description of the operating conditions of the affected operations.
 - E. Raw data.
 - F. Opacity determinations.
 - G. Conclusions.

7.2.8 Inspection Requirements

- a. The Permittee shall comply with the following inspection requirements for the affected operations, including enclosures, dust collectors and dust suppressant application devices.
 - i. Pursuant to Construction Permit 99020066, the Permittee shall perform inspections of the Stackout Conveyor, Reclaim Hoppers and Railcar Unloader, including enclosures and dust suppressant application devices, on at least a monthly basis to confirm compliance with the requirements of Condition 7.2.6(a). If an affected

operation is not in use during an inspection, this shall be noted in the inspection record. [T1R]

Note: The inspection frequency in Condition 7.2.8(a)(i) for the equipment and controls identified in that condition supersedes the weekly frequency requirements in Condition 8(a) of Construction Permit 99020066, issued October 5, 2001.

- ii. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall perform inspections of all other affected operations not identified in Condition 7.2.8(a)(i) on at least a monthly basis to confirm compliance with the requirements of Condition 7.2.6(a). If an affected operation is not in use during an inspection, this shall be noted in the inspection record.
- iii. Pursuant to Section 39.5(7)(b) of the Act, as part of the inspections in Conditions 7.2.8(a)(i) and (ii), the Permittee shall record and verify that, for each dust collector that is a baghouse, the monitored differential pressure is within the operating range specified in the record required by Condition 7.2.9(b)(i).
- iv. Pursuant to Sections 39.5(7)(b) and (d) of the Act, the records required by Condition 7.2.9(d) for the inspections in Conditions 7.2.8(a)(i) and (ii) shall be signed off by supervisory or management personnel.
- b. Pursuant to Sections 39.5(7)(b) and (d) of the Act, to demonstrate compliance with the requirements of Condition 7.2.4(b), as part of the inspections required by Condition 7.2.8(a), the Permittee shall perform observations once during each calendar year of affected operation(s) for visible emissions in accordance with 35 IAC 212.107, unless the Permittee elects to perform Reference Method 9 observations in accordance with Condition 7.2.7(a) for the operation(s). These observations must be conducted for each affected operation that is in routine service and in use that year. If visible emissions are observed, the Permittee shall take corrective action within 2 hours to return the status of the operations to no visible emission or shall conduct observations of opacity by Reference Method 9 within one week in accordance with Condition 7.2.7(a). If the Permittee performs Reference Method 9 observations under this Condition 7.2.8(b), such observations are not subject to the notice requirements of Condition 7.2.7(a)(iii) through (v).
- c. Pursuant to 39.5(7)(b) and (d) of the Act, the Permittee shall perform a visual survey of the coal storage pile operations as follows:
 - i. Coal storage pile operations shall be visually surveyed at least twice per month between May 1st and November 30th of each calendar year.

- ii. Coal storage pile operations shall be visually surveyed on at least a monthly basis at all other times during the calendar year.
- iii. As part of these visual surveys, the Permittee shall perform an observation of the coal storage pile operations for visible emissions in accordance with 35 IAC 212.107 unless the Permittee elects to perform a Reference Method 9 observation.
 - A. The overall duration of any observation for visible emissions shall be at least 10 minutes.
 - B. The duration of any Reference Method 9 observation shall be at least 6 minutes.
- iv. If visible emissions from the coal storage pile are observed going beyond the property boundary or the average opacity of the Reference Method 9 observation is greater than 20% at the storage pile, the Permittee shall take action within 2 hours, if necessary, to ensure that fugitive particulate matter emissions do not exceed 30% opacity.
- v. The Permittee shall maintain records of the following for each visual survey:
 - A. Date and time the visual survey was performed and name(s) of personnel performing the visual survey.
 - B. The observed activity and condition of the coal storage pile, including the presence of any visible emissions and the recent weather conditions.
 - C. A summary of any emission control activities performed on the coal storage pile since the last visual survey.
 - D. A description of any action taken if visible emissions were observed crossing the property boundary, including whether action took place within 2 hours of the observation. The record in this Condition 7.2.8(c)(v)(D) shall be signed off by supervisory or management personnel.
- d. Prior to commencing unloading of each train set (i.e., a coal unit train), the Permittee shall record and verify that the monitored dust collector differential pressure is within the operating range specified in the record required by Condition 7.2.9(b)(i) and that visible emissions are not observed in the dust collector exhaust [Sections 39.5(7)(a) and (d) of the Act].

7.2.9 Recordkeeping Requirements

Pursuant to Sections 39.5(7)(a) and (e) of the Act:

- a. The Permittee shall maintain records of the following for the affected operations:
 - i. The maximum operating capacity of each affected operation, (ton/hr).
 - ii. Information related to the dust collectors that are baghouses associated with the affected operations, including available design control efficiency or performance specifications and maximum design particulate matter emissions, gr/dscf, with supporting information, which information shall be kept up to date.
 - iii. Maintenance and repair record(s) for the air pollution control equipment associated with the affected operations, which record(s) shall list the activities performed on each item of equipment or system, with date and description. (See also Condition 9.6.1, Control Equipment Maintenance Records.)
- b.
 - i. The Permittee shall maintain a record, which shall be kept up to date to reflect any changes that the Permittee may elect to make, that contains the following for each affected operation for which a control measure(s) must be implemented and maintained pursuant to Condition 7.2.6(a)(i).
 - A. The type of emission unit (conveyor, storage pile, etc.) and the Permittee's designation for each emission unit with a description of the emission points on the emission unit.
 - B. Whether the emission unit is considered to be an "affected facility" for purposes of the NSPS, with copies of supporting documentation.
 - C. Description of the primary control measures that are utilized, with a description of the control measure and estimated frequency of application, if not continuous. If the primary control device is a dust collector that is a baghouse, identification of the normal operating range for the differential pressure across the dust collector.
 - D. Description of any secondary control measures that would be used based on circumstances (freezing temperatures, recent rain, dry weather, etc.) with identification of the circumstances in which they would be used and whether they would take the place of or supplement the primary control measures.

- ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the control measures identified in the record required by Condition 7.2.9(b)(i) are sufficient to assure compliance with Condition 7.2.4(c) or (d), depending on date constructed or modified, at the maximum process weight rate at which each affected operations can be operated (tons coal/hour) and the emission limitations in Condition 7.2.6(b)(i)(B) (tons/yr), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. This demonstration shall include the information addressed by Condition 7.2.9(a), and emission factors for uncontrolled PM emissions and/or controlled PM emissions published by USEPA or other credible sources.
- iii. Any subsequent revisions to this record related to control measures or affected operations, including their method of operation, shall be submitted not later than 30 days after the date of the revision. Upon request by the Illinois EPA, the Permittee shall submit other relevant information related to the control measures.
- c. The Permittee shall maintain the following operating records:
 - i. The amount of coal and other solid fuels received at the source, by type of fuel (tons/month and tons/year).
 - ii. The throughput of the rotary railcar unloading operation (tons/month and tons/year).
- d. The Permittee shall maintain records of the following for the inspections required by Condition 7.2.8:
 - i. Date and time the inspection was performed, name(s) of inspection personnel, and specific affected operation(s) inspected.
 - ii. The observed condition of the control measures identified in the record required by Condition 7.2.9(b)(i) for each inspected affected operation, including the presence of any visible emissions or atypical accumulations of coal fines in the vicinity of the operation.
 - iii. A description of any maintenance or repair of equipment associated with the control measures identified in the record required by Condition 7.2.9(b)(i) that is recommended as a result of the inspection, and associated work order ticket number(s).
 - iv. A description of any corrective action taken if visible emissions were observed during an observation conducted in accordance with 35 IAC 212.107, including whether corrective action took place within 2 hours of the

observation and whether the status of the operation returned to no visible emissions.

- e. The Permittee shall maintain records of the following for each incident when any affected operation was in use without the control measure(s) required pursuant to the record required by Condition 7.2.9(b)(i) and each incident when an affected operation continued to operate during malfunction or breakdown with excess emissions or excess opacity as addressed by Condition 7.2.3(b):
 - i. The date of the incident and identification of the affected operation(s) that was involved.
 - ii. A description of the incident, including the control measure(s) that was not present or operated as required by the record identified in Condition 7.2.9(b)(i); other control measures that were operated, if any; the measures taken to minimize and correct deficiencies with chronology; and an explanation whether the emissions or opacity during the incident exceeded any applicable emission or opacity standard, as listed in Condition 7.2.4.
 - iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.
 - iv. The length of time after the incident was identified that the affected operation(s) continued to operate before the control measure(s) identified in the record required by Condition 7.2.9(b)(i) was in place or the operation(s) were shut down (to resume operation only after such control measures were in place); an explanation of why continued operation was necessary; and, if this time was more than one hour, an explanation of why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.
 - v. The estimated total duration of the incident, i.e., the total length of time that the affected operation(s) ran without the control measure(s) required pursuant to the record required by Condition 7.2.9(b)(i) and the estimated amount of coal handled during the incident.
 - vi. A discussion of the probable cause of the incident and any preventative measures taken.
- f. The Permittee shall keep records for all opacity observations made in accordance with Reference Method 9 for the affected operations that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.2.7(a),

or otherwise the identity of the observer, a description of the observations that were made, the operating condition of the affected operation(s), the observed opacity, copies of the raw data sheets for the observations, and the reason for the opacity observations, e.g., Reference Method 9 opacity observations required by Condition 7.2.7(a)(i), written request by the Illinois EPA, or any required Reference Method 9 opacity observations following observations of visible emissions under Condition 7.2.8(b).

- g. To demonstrate compliance with Condition 7.2.6(b), the Permittee shall keep records of actual PM emissions (tons/month and tons/year) from the conveyors and unloading operations subject to emission limitations in Condition 7.2.6(b), based on the records required by 7.2.9(b)(ii) and 7.2.9(c).

7.2.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for affected operations, as follows. Such notifications shall include a description of each deviation and a discussion of the probable cause of such deviation, any corrective actions taken, and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act.

- i. For those breakdown or malfunction opacity events that require notification and reporting pursuant to Condition 7.2.10(b)(i), notification and reporting shall be provided pursuant to Condition 7.2.10(b)(i) rather than 7.2.10(a).
- ii. Within 30 days after the conclusion of an incident in which the Permittee continued to operate an affected operation for more than 12 operating hours after discovering that emission control measures required by the record identified in Condition 7.2.9(b)(i) were not present or operating, the Permittee shall submit written notice to the Illinois EPA. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.2.9(e).
- iii. A. Except for events and incidents for which notification or reporting is required by Condition 7.2.10(a)(ii) or 7.2.10(b)(i), as referenced in 7.2.10(a)(i), all other notifications shall be submitted with the quarterly reports required by Condition 7.2.10(b)(ii).
- B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit

the detailed information provided in prior notifications and reports for such deviations.

b. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA for incidents when operation of an affected operation(s) continued with excess emissions or excess opacity during malfunction or breakdown as addressed by Condition 7.2.3(b).

- i. A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile or electronic mail, for each incident in which the opacity from an affected operation exceeds 30 percent for eight or more 6-minute averaging periods within a two-hour period unless the Permittee has begun the shutdown of the affected operation(s) by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods within a two-hour period or the Permittee has begun the shutdown of the affected operation(s) by such time, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.2.10(b)(ii).)
- B. Upon conclusion of each incident that is two hours or more in duration, the Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a copy of the records for the incident required by Condition 7.2.9(e).
- ii. The Permittee shall submit quarterly reports to the Illinois EPA that include the following information for incidents during the quarter in which affected operations continued to operate during malfunction or breakdown with excess emissions or excess opacity. These reports shall be submitted with the quarterly reports submitted for the coal-fired boilers pursuant to Condition 7.1.10-2(a).
 - A. A listing of such incidents, in chronological order, that includes:
 - I. The date, time, and duration of each incident.
 - II. The identity of the affected operation(s) involved in the incident.
 - III. Whether a follow-up notice was submitted for the incident pursuant to Condition

7.2.10(b)(i)(B), with the date of the notice.

- B. A description of the incident, discussion of probable cause of the incident, corrective actions taken, and any preventative measures taken; provided, however, that the Permittee need not resubmit information provided in a prior report for an incident, as identified above, but may elect to supplement the prior submittal.
- C. The sum duration of all incidents during the quarter.
- D. If there have been no such incidents during the calendar quarter, this shall be stated in the report.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational changes with respect to the affected operations without prior notification to the Illinois EPA or revision of this permit, pursuant to Sections 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, or for an activity for which a permit is required pursuant to 35 IAC 201.142.

- a. Handling of solid fuels other than coal.
- b. Operation of additional dust suppressant systems.
- c. Operation of additional dust collection equipment.
- d. Operation of replacement dust suppression systems or dust collection equipment that is of equal or greater effectiveness in controlling visible emissions than the device(s) being replaced, as recognized in a construction permit for such system or equipment.

7.2.12 Compliance Procedures

- a. Compliance with Conditions 7.2.4 is addressed by the observations, inspections, and recordkeeping required by Conditions 7.2.7, 7.2.8, and 7.2.9, respectively.
- b. Compliance with Condition 7.2.6 is addressed by the inspections and recordkeeping required by Conditions 7.2.8 and 7.2.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

7.3 Coal Processing Equipment

7.3.1 Description

The Permittee prepares or processes coal for use as fuel in its boilers with conditioners that reduce the size of the coal. Associated particulate matter (PM) emissions are controlled by various control measures such as moisture content of the coal, enclosures and covers, dust suppression and a dust collection device.

Note: The description in Condition 7.3.1 is for informational purposes only and implies no limits or constraints.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment/Measures
Coal Conditioners	Coal Sizing Operation	Enclosures and Covers, Dust Suppression and Dust Collection Device

7.3.3 Applicability Provisions

- a. An "affected process" for the purpose of these unit-specific conditions is an individual process emission unit that prepares coal for use as a fuel by conditioning the coal as described in Conditions 7.3.1 and 7.3.2.
- b. Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected process in violation of the applicable standards identified or cross-referenced in Conditions 5.2.2(b) (35 IAC 212.123) and Condition 7.3.4(c) (35 IAC 212.322(a)) in the event of a malfunction or breakdown of an affected process. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262 as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.
 - i. This authorization only allows such continued operation as related to the operation of the coal-fired boilers as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
 - ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable repair the affected process, remove the affected process

from service or undertake other action so that excess emissions cease.

- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Condition 7.3.9(d) and 7.3.10(b). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected process out of service.
- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.3.4 Applicable Emission Standards

- a. The standard that addresses fugitive emissions, as defined by 35 IAC 211.2490, of the affected processes is set forth in Condition 5.2.2(a).
- b. The standard that addresses the opacity of the emission of smoke or other particulate matter from the affected processes is set forth in Condition 5.2.2(b).
- c. The affected processes shall comply with 35 IAC 212.322(a): "no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission at a source or premises, exceeds the allowable emission rates specified in subsection (c) of [35 IAC 212.322]". Each unit, i.e. each coal conditioner, shall demonstrate compliance individually. (See also Attachment 2.) [35 IAC 212.322(a)].

7.3.5 Non-Applicability of Regulations of Concern

- a. The affected processes are not subject to NSPS, "Standards of Performance for Coal Preparation and Processing Plants," 40 CFR 60 Subpart Y, because the affected processes were not constructed, reconstructed or modified after October 24, 1974, or May 27, 2009, as applicable.
- b. The affected processes are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM because the affected processes do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.3.6 Work Practices

- a.
 - i. The Permittee shall implement and maintain the control measures for the affected processes, such as the moisture content of the coal, enclosures and covers, dust suppression, and a dust collection device, for emissions of particulate matter to support the periodic monitoring for the applicable requirements in Condition 7.3.4, pursuant to Section 39.5(7)(a) of the Act.
 - ii. The control measures implemented and maintained shall be identified and operated in conformance with the "Control Measures Record" required by Condition 7.3.9(b)(i) to satisfy Condition 7.3.6(a)(i), which record is incorporated by reference into this permit by Condition 5.2.8.

7.3.7 Opacity Observation Requirements

- a.
 - i. The Permittee shall have the opacity of the emissions from the affected processes during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.
 - A. For each affected process, observations shall be conducted not later than two years after the effectiveness of this condition.
 - B. Thereafter, for each affected process, observations shall be conducted every third year.
 - C. Upon written request by the Illinois EPA, such observations shall be conducted for specific affected process(es) not later than 45 calendar days after the Permittee has received the request or on such later date agreed to by the Illinois EPA.
 - ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless

the average opacities for the first 12 minutes of observations (two six-minute averages) are each not greater than 10.0 percent.

- iii. A. For each set of observations required by Conditions 7.3.7(a)(i)(A), (B), and (C), the Permittee shall notify the Illinois EPA at least 7 days in advance of the date of the first observation.
- B. The Permittee shall promptly notify the Illinois EPA of any changes in the date of the first observation.
- iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observation(s), if Illinois EPA personnel are present.
- v. The Permittee shall submit a written report for these observations not later than 30 days after the date of completion of each set of opacity observations required by Conditions 7.3.7(a)(i)(A), (B), and (C). The report shall include a copy of the current Reference Method 9 certification of each observer and shall identify the observer's current employer. This report shall also include the following for each observation:
 - A. Identification of the affected process for which observations were conducted.
 - B. Date and time of observations.
 - C. Description of observation conditions, including recent weather.
 - D. Description of the operating conditions of the affected processes.
 - E. Raw data.
 - F. Opacity determinations.
 - G. Conclusions.

7.3.8 Inspection Requirements

- a. The Permittee shall perform inspections of the affected processes on at least a monthly basis to confirm compliance with the requirements of Condition 7.3.6(a). If an affected process is not in operation during an inspection, this shall be noted in the inspection record. As part of this inspection, the Permittee shall record and verify that the monitored differential pressure for the dust collector (which is a baghouse) associated with the affected processes is within the operating range specified in the record required by Condition 7.3.9(b)(i). The records required by Condition

7.3.9(c) for these inspections shall be signed off by supervisory or management personnel [Sections 39.5(7)(a) and (d) of the Act].

- b. Pursuant to Sections 39.5(7)(a) and (d) of the Act, to demonstrate compliance with the requirements of Condition 7.3.4(b), as part of the inspections required by Condition 7.3.8(a), the Permittee shall perform observations once during each calendar year of affected process(es) for visible emissions in accordance with 35 IAC 212.107 unless the Permittee elects to perform Reference Method 9 observations in accordance with Condition 7.3.7(a) for the process(es). These observations must be conducted for each affected process that is in routine service and in use that year. If visible emissions are observed, the Permittee shall take corrective action within 2 hours to return the status of the process to no visible emission or shall conduct observations of opacity by Reference Method 9 within one week in accordance with Condition 7.3.7(a). If the Permittee performs Reference Method 9 observations under this Condition 7.3.8(b), such observations are not subject to the notice requirements of Condition 7.3.7(a)(iii) through (v)].

7.3.9 Recordkeeping Requirements

Pursuant to Section 39.5(7)(a) and (e) of the Act:

- a. The Permittee shall maintain records of the following for the affected processes:
 - i. The maximum operating capacity of each affected process (ton/hour).
 - ii. Information related to the dust collector (which is a baghouse) associated with the affected processes, including available design control efficiency or performance specifications and maximum design particulate matter emissions, gr/dscf, with supporting information, which information shall be kept up to date.
 - iii. Maintenance and repair record(s) for the air pollution control equipment associated with the affected processes, which record(s) shall list the activities performed on each item of equipment or system, with date and description. (See also Condition 9.6.1, Control Equipment Maintenance Records.)
- b.
 - i. The Permittee shall maintain a record, which shall be kept up to date to reflect any changes that the Permittee may elect to make, that contains the following for each affected process for which a control measure(s) must be implemented and maintained pursuant to Condition 7.3.6(a)(i).
 - A. The type of emission unit (conditioners, etc.) and the Permittee's designation for each emission unit

with a description of the emission points on the emission unit.

- B. Whether the emission unit is considered to be an "affected facility" for purposes of the NSPS, with copies of supporting documentation.
 - C. Description of the primary control measures that are utilized, with a description of the control measure and estimated frequency of application, if not continuous. If the primary control device is a dust collector that is a baghouse, identification of the normal operating range for the differential pressure across the dust collector.
 - D. Description of any secondary control measures that would be used based on circumstances (freezing temperatures, recent rain, dry weather, etc.) with identification of the circumstances in which they would be used and whether they would take the place of or supplement the primary control measures.
- ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the control measures identified in the record required by Condition 7.3.9(b)(i) are sufficient to assure compliance with Condition 7.3.4(c) at the maximum process weight rate at which each affected process can be operated (tons coal/hour), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. This demonstration shall include the information addressed by Condition 7.3.9(a), emission factors for uncontrolled PM emissions and/or controlled PM emissions published by USEPA or other credible sources.
 - iii. Any subsequent revisions to this record related to control measures or affected processes, including their method of operation, shall be submitted not later than 30 days after the date of the revision. Upon request by the Illinois EPA, the Permittee shall submit other relevant information related to the control measures.
- c. The Permittee shall maintain records of the following for the inspections required by Condition 7.3.8:
 - i. Date and time the inspection was performed, name(s) of inspection personnel, and specific affected process(es) inspected.
 - ii. The observed condition of the control measures identified in the record required by Condition 7.3.9(b)(i) for each inspected affected process, including the presence of any visible emissions or

atypical accumulations of coal fines in the vicinity of the process.

- iii. A description of any maintenance or repair of equipment associated with the control measures identified in the record required by Condition 7.3.9(b)(i) that is recommended as a result of the inspection, and associated work order ticket number(s).
 - iv. A description of any corrective action taken if visible emissions were observed during an observation conducted in accordance with 35 IAC 212.107, including whether corrective action took place within 2 hours of the observation and whether the status of the process returned to no visible emissions.
- d. The Permittee shall maintain records of the following for each incident when any affected process operated without the control measure(s) required pursuant to the record required by Condition 7.3.9(b)(i) and each incident when an affected process continued to operate during malfunction or breakdown with excess emissions or excess opacity as addressed by Condition 7.3.3(b):
- i. The date of the incident and identification of the affected process(es) that was involved.
 - ii. A description of the incident, including the control measure(s) that was not present or operated as required by the record identified in Condition 7.3.9(b)(i); other control measures that were operated, if any; the measures taken to minimize and correct deficiencies with chronology; and an explanation whether the emissions or opacity during the incident exceeded any applicable emission or opacity standard, as listed in Condition 7.3.4.
 - iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.
 - iv. The length of time after the incident was identified that the affected process(es) continued to operate before the control measure(s) identified in the record required by Condition 7.3.9(b)(i) was in place or the process(es) was shut down (to resume operation only after such control measures were in place); an explanation of why continued operation was necessary; and, if this time was more than one hour, an explanation of why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.
 - v. The estimated total duration of the incident, i.e., the total length of time that the affected process(es) ran without the control measure(s) required pursuant to the

record required by Condition 7.3.9(b)(i) and the estimated amount of coal processed during the incident.

- vi. A discussion of the probable cause of the incident and any preventative measures taken.
- e. The Permittee shall keep records for all opacity observations made in accordance with Reference Method 9 for the affected processes that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.3.7(a), or otherwise the identity of the observer, a description of the observations that were made, the operating condition of the affected process(es), the observed opacity, copies of the raw data sheets for the observations, and the reason for the opacity observations, e.g., Reference Method 9 opacity observations required by Condition 7.3.7(a)(i), written request by the Illinois EPA, or any required Reference Method 9 opacity observations following observations of visible emissions under Condition 7.3.8(b).

7.3.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for affected processes, as follows. Such notifications shall include a description of each deviation and a discussion of the probable cause of such deviation, any corrective actions taken, and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act.

- i. For those breakdown or malfunction opacity events that require notification and reporting pursuant to Condition 7.3.10(b)(i), notification and reporting shall be provided pursuant to Condition 7.3.10(b)(i) rather than 7.3.10(a).
- ii. Within 30 days after the conclusion of an incident in which the Permittee continued to operate an affected process for more than 12 operating hours after discovering that emission control measures required by the record identified in Condition 7.3.9(b)(i) were not present or operating, the Permittee shall submit written notice to the Illinois EPA. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.3.9(d).
- iii. A. Except for events and incidents for which notification or reporting is required by Condition 7.3.10(a)(ii) or 7.3.10(b)(i), as referenced in 7.3.10(a)(i), all other notifications shall be

submitted with the quarterly reports required by Condition 7.3.10(b)(ii).

- B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in prior notifications and reports for such deviations.

b. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA for incidents when operation of affected process(es) continued with excess emissions or excess opacity during malfunction or breakdown as addressed by Condition 7.3.3(b).

- i. A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile or electronic mail, for each incident in which the opacity from an affected process exceeds 30 percent for eight or more 6-minute averaging periods within a two-hour period unless the Permittee has begun the shutdown of the affected process(es) by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods within a two-hour period or the Permittee has begun the shutdown of the affected process(es) by such time, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.3.10(b)(ii).)
- B. Upon conclusion of each incident that is two hours or more in duration, the Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a copy of the records for the incident required by Condition 7.3.9(d).
- ii. The Permittee shall submit quarterly reports to the Illinois EPA that include the following information for incidents during the quarter in which affected processes continued to operate during malfunction or breakdown with excess emissions or excess opacity. These reports shall be submitted with the quarterly reports submitted for the coal-fired boilers pursuant to Condition 7.1.10-2(a).
- A. A listing of such incidents, in chronological order, that includes:

- I. The date, time, and duration of each incident.
 - II. The identity of the affected process(es) involved in the incident.
 - III. Whether a follow-up notice was submitted for the incident pursuant to Condition 7.3.10(b)(i)(B), with the date of the notice.
- B. A description of the incident, discussion of probable cause of the incident, corrective actions taken, and any preventative measures taken; provided, however, that the Permittee need not resubmit information provided in a prior report for an incident, as identified above, but may elect to supplement the prior submittal.
 - C. The sum duration of all incidents during the quarter.
 - D. If there have been no such incidents during the calendar quarter, this shall be stated in the report.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational changes with respect to the affected processes without prior notification to the Illinois EPA or revision of this permit, pursuant to Sections 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, or for an activity for which a permit is required pursuant to 35 IAC 201.142.

- a. Processing of solid fuels other than coal.
- b. Operation of additional dust suppressant systems.
- c. Operation of additional dust collection equipment.
- d. Operation of replacement dust suppression systems or dust collection equipment that is of equal or greater effectiveness in controlling visible emissions than the device(s) being replaced, as recognized in a construction permit for such system or equipment.

7.3.12 Compliance Procedures

- a. Compliance with Condition 7.3.4 is addressed by the observations, inspections, and recordkeeping required by Conditions 7.3.7, 7.3.8, and 7.3.9, respectively.

- b. Compliance with Condition 7.3.6 is addressed by the inspections and recordkeeping required by Conditions 7.3.8 and 7.3.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

7.4 Fly Ash Equipment and Spray Dryer Absorber Ash Equipment

7.4.1 Description

The Permittee operates fly ash removal systems that handle and store fly ash collected by the ESPs on the coal-fired boilers. Fly ash is stored in two silos, one serving Units 1 and 2, and the other serving Unit 3. Each silo has a dry loadout system. The silo for Units 1 and 2 also has a moisture addition system used to condition fly ash from Units 1 and 2 to facilitate handling of the ash in open top trucks. The silo for Unit 3 also has a bucket elevator loadout system for loading rail cars.

The Permittee also operates two Spray Dryer Absorber (SDA) Ash removal systems that handle and store SDA ash collected by the baghouses on the coal fired boilers. SDA ash is stored in two silos, one serving Units 1 and 2, and the other serving Unit 3. Each silo has a dry loadout system. Each silo also has a moisture addition system that is used to condition SDA ash to facilitate handling of the ash in open top trucks.

Associated particulate matter (PM) emissions from this equipment are controlled by various control measures such as moisture content of the ash, enclosures and dust collection devices.

Note: The description in Condition 7.4.1 is for informational purposes only and implies no limits or constraints.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment/Measures
Fly Ash Conveying	Pneumatic Transfer Systems	Bin Vent Filters
Silos with Fly Ash Receivers	Fly Ash storage from ESPs	Hooding and Bin Vent Filters
Fly Ash Loadout (Dry)	Loading to trucks or railcar	Adjustable loadout spout with return to silos and a dust collector
Fly Ash Loadout (Wet)	Pug mills	Moisture addition
SDA Ash Silos	SDA storage from BHs	Bin Vent filters
SDA Ash Loadout (Dry)	Loading to trucks	Adjustable loadout spout with return to silos
SDA Ash Loadout (Wet)	Pug mills	Moisture addition

7.4.3 Applicability Provisions

- a. An "affected process" for the purpose of these unit-specific conditions is an individual process emission unit as described in Conditions 7.4.1 and 7.4.2.
- b. Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected process in violation of the applicable standards identified or cross-referenced in Conditions 5.2.2(b) (35 IAC 212.123) and 7.4.4(c) (35 IAC 212.321(a)) in the event of a malfunction or breakdown of an affected process. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.
 - i. This authorization only allows such continued operation as related to the operation of the coal-fired boilers as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
 - ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable repair the affected process, remove the affected process from service, or undertake other action so that excess emissions cease.
 - iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Condition 7.4.9(e) and 7.4.10(b). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected process out of service.
 - iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
 - v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued

operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.4.4 Applicable Emission Standards

- a. The standard that addresses fugitive emissions, as defined by 35 IAC 211.2490, of the affected processes is set forth in Condition 5.2.2(a).
- b. The standard that addresses the opacity of the emission of smoke or other particulate matter from the affected processes is set forth in Condition 5.2.2(b).
- c. The affected processes shall comply with 35 IAC 212.321(a): "no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of [35 IAC 212.321]". Each unit, i.e., each fly ash or SDA ash conveyor or silo, shall demonstrate compliance individually. (See also Attachment 1.) [35 IAC 212.321(a)].

7.4.5 Non-Applicability of Regulations of Concern

- a. The affected processes are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM, because the affected processes do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.
- b. This permit is issued based on the affected processes not being subject to the New Source Performance Standards (NSPS) for Nonmetallic Mineral Processing Plants, 40 CFR Part 60, Subparts A and 000, because the affected processes do not meet the definition of a nonmetallic mineral processing plant because there is no equipment used to crush or grind ash.

7.4.6 Work Practices and Emission Limitations

- a. i. The Permittee shall implement and maintain the control measures for the affected processes, such as moisture content of the fly ash and SDA ash, enclosures, and dust collection devices, for emissions of particulate matter to support the periodic monitoring for the applicable requirements in Conditions 7.4.4, 7.4.6(b) and 7.4.6(c), pursuant to Section 39.5(7)(a) of the Act.

ii. The control measures implemented and maintained shall be identified and operated in conformance with the "Control Measures Record" required by Condition 7.4.9(b)(i) to satisfy Condition 7.4.6(a)(i), which record is incorporated by reference into this permit by Condition 5.2.8.

b. PM emissions from Units 1 and 2 Fly Ash Silo (filter) shall not exceed 0.4 lbs/hr and 1.50 tons/year. Compliance with annual limit shall be determined from the fly ash fan operating hours. [T1]

Note: The above limitations were established in Permit 99020066.

c. i. Stack emissions of PM associated with the stacks from the dry fly ash rail load-out system shall not exceed 0.2 lbs/hr and 0.88 tons/yr.

ii. Uncaptured emissions of PM associated with dry fly ash rail load-out shall not exceed 0.2 lbs/hr and 0.88 tons/yr.

Note: The above limitations were established in Construction Permit 03110014.

7.4.7 Opacity Observation Requirements

a. i. The Permittee shall have the opacity of the emissions from the affected processes during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.

A. For each affected process, observations shall be conducted not later than two years after the effectiveness of this condition.

B. Thereafter, for each affected process, observations shall be conducted every third year.

C. Upon written request by the Illinois EPA, such observations shall be conducted for specific affected process(es) not later than 45 calendar days after the Permittee received the request or such later date agreed to by the Illinois EPA.

ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are each not greater than 10.0 percent.

iii. A. For each set of observations required by Conditions 7.4.7(a)(i)(A), (B), and (C), the Permittee shall notify the Illinois EPA at least 7

days in advance of the date of the first observation.

- B. The Permittee shall promptly notify the Illinois EPA of any changes in the date of the first observation.
- iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observation(s), if Illinois EPA personnel are present.
- v. The Permittee shall submit a written report for these observations not later than 30 days after the date of completion of each set of opacity observations required by Conditions 7.4.7(a)(i)(A), (B), and (C). The report shall include a copy of the current Reference Method 9 certification of each observer and shall identify the observer's current employer. This report shall also include the following for each observation:
 - A. Identification of the affected process for which observations were conducted.
 - B. Date and time of observations.
 - C. Description of observation conditions, including recent weather.
 - D. Description of the operating conditions of the affected processes.
 - E. Raw data.
 - F. Opacity determinations.
 - G. Conclusions.

7.4.8 Inspection Requirements

- a. The Permittee shall perform inspections as follows to confirm compliance with the requirements of Condition 7.4.6(a) [Sections 39.5(7)(a) and (d) of the Act].
 - i. Affected processes other than fly ash and SDA ash loadout shall be inspected on, at least, a monthly basis.
 - ii. Affected fly ash and SDA ash loadout shall be inspected on at least a weekly basis.
 - iii. As part of the weekly inspections for the affected railcar fly ash loadout, the Permittee shall record and verify that the monitored differential pressure for the dust collector (which is a baghouse) is within the operating range specified in the record required by Condition 7.4.9(b)(i).

- iv. If an affected process is not in operation during an inspection, this shall be noted in the inspection record.
- v. The records required by Condition 7.4.9(d) for these inspections shall be signed off by supervisory or management personnel.
- b. Pursuant to Sections 39.5(7)(b) and (d) of the Act, to demonstrate compliance with the requirements of Condition 7.4.4(b), as part of the inspections required by Condition 7.4.8(a), the Permittee shall perform observations once during each calendar year of affected process(es) other than loadouts and once during each calendar quarter for affected loadout process(es) for visible emissions in accordance with 35 IAC 212.107, unless the Permittee elects to perform Reference Method 9 observations in accordance with Condition 7.4.7(a) for the process(es). These observations must be conducted for each affected process that is in routine service and in use that year or quarter, respectively. If visible emissions are observed, the Permittee shall take corrective action within 2 hours to return the status of the process to no visible emission or shall conduct observations of opacity by Reference Method 9 within one week in accordance with Condition 7.4.7(a). If the Permittee performs Reference Method 9 observations under this Condition 7.4.8(b), such observations are not subject to the notice requirements of Condition 7.4.7(a)(iii) through (v).

7.4.9 Recordkeeping Requirements

Pursuant to Sections 39.5(7)(a) and (e) of the Act:

- a. The Permittee shall maintain records of the following for the affected processes:
 - i. The maximum operating capacity of each affected process (ton/hour).
 - ii. Information related to the dust collector (which is a baghouse) associated with railcar loadout, including the performance specifications for filter material and maximum design particulate matter emissions, gr/dscf.
 - iii. Maintenance and repair record(s) for the air pollution control equipment associated with the affected processes, including dust suppressant application systems, which record(s) shall list the activities performed on each item of equipment or system, with date and description. (See also Condition 9.6.1, Control Equipment Maintenance Records.)
- b. i. The Permittee shall maintain a record, which shall be kept up to date to reflect any changes that the Permittee may elect to make, that contains the following

for each affected process for which a control measure(s) must be implemented and maintained pursuant to Condition 7.4.6(a)(i).

- A. The type of emission unit (pneumatic transfer system, silos, etc.) and the Permittee's designation for each emission unit with a description of the emission points on the emission unit.
 - B. Description of the primary control measures that are utilized, with a description of the control measure and estimated frequency of application, if not continuous. If the primary control device is a dust collector that is a baghouse, identification of the normal operating range for the differential pressure across the dust collector.
 - C. Description of any secondary control measures that would be used based on circumstances (freezing temperatures, recent rain, dry weather, etc.) with identification of the circumstances in which they would be used and whether they would take the place of or supplement the primary control measures.
- ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the control measures identified in the record required by Condition 7.4.9(b)(i) are sufficient to assure compliance with Condition 7.4.4(c) at the maximum process weight rate at which each affected process can be operated (tons fly ash/hour or SDA ash/hour) and with the PM emission limitations in Conditions 7.4.6(b) and 7.4.6(c) (lbs/hr and tons/yr), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. This demonstration shall include the information addressed by Condition 7.4.9(a), emission factors for uncontrolled PM emissions and/or controlled PM emissions published by USEPA or other credible sources.
 - iii. Any subsequent revisions to this record related to control measures or affected processes, including their method of operation, shall be submitted not later than 30 days after the date of the revision. Upon request by the Illinois EPA, the Permittee shall submit other relevant information related to the control measures.
- c. The Permittee shall maintain records of the amount of fly ash and SDA ash handled by the affected processes (tons/month and tons/year).

- d. The Permittee shall maintain records of the following for the inspections required by Condition 7.4.8:
 - i. Date and time the inspection was performed, name(s) of inspection personnel, and specific affected process(es) inspected.
 - ii. The observed condition of the control measures identified in the record required by Condition 7.4.9(b)(i) for each inspected affected process, including the presence of any visible emissions or atypical accumulations of ash in the vicinity of the process.
 - iii. A description of any maintenance or repair of equipment associated with the control measures identified in the record required by Condition 7.4.9(b)(i) that is recommended as a result of the inspection and associated work order ticket number(s).
 - iv. A description of any corrective action taken if visible emissions were observed during an observation conducted in accordance with 35 IAC 212.107, including whether corrective action took place within 2 hours of the observation and whether the status of the process returned to no visible emissions.
- e. The Permittee shall maintain records of the following for each incident when any affected process operated without the control measure(s) required pursuant to the record required by Condition 7.4.9(b)(i) and each incident when an affected process continued to operate during malfunction or breakdown with excess emissions or excess opacity as addressed by Condition 7.4.3(b):
 - i. The date of the incident and identification of the affected process(es) that was involved.
 - ii. A description of the incident, including the control measure(s) that was not present or operated as required by the record identified in Condition 7.4.9(b)(i); other control measures that were operated, if any; the measures taken to minimize and correct deficiencies with chronology; and an explanation whether the emissions or opacity during the incident exceeded any applicable emission or opacity standard, as listed in Condition 7.4.4.
 - iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.
 - iv. The length of time after the incident was identified that the affected process(es) continued to operate before the control measure(s) identified in the record required by Condition 7.4.9(b)(i) was in place or the

process(es) was shut down (to resume operation only after such control measure(s) was in place); an explanation of why continued operation was necessary; and, if this time was more than one hour, an explanation of why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.

- v. The estimated total duration of the incident, i.e., the total length of time that the affected process(es) ran without the control measure(s) required pursuant to the record required by Condition 7.4.9(b)(i) and the estimated amount of fly ash or SDA ash handled during the incident.
- vi. A discussion of the probable cause of the incident and any preventative measures taken.
- f. The Permittee shall keep records for all opacity observations made in accordance with Reference Method 9 for the affected processes that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.4.7(a), or otherwise the identity of the observer, a description of the observations that were made, the operating condition of the affected process(es), the observed opacity, copies of the raw data sheets for the observations, and the reason for the opacity observations, e.g., Reference Method 9 opacity observations required by Condition 7.4.7(a)(i), written request by the Illinois EPA, or any required Reference Method 9 opacity observations following observations of visible emissions under Condition 7.4.8(b).
- g. To demonstrate compliance with Condition 7.4.6(b), the Permittee shall keep records of PM emissions (tons/month and tons/year) from the Units 1 and 2 Fly Ash Silo, based on the above records, with supporting calculations.
- h. To demonstrate compliance with Condition 7.4.6(c), the Permittee shall keep records of PM emissions (tons/month and tons/year) from the dry fly ash rail loadout system, based on the above records, with supporting calculations.

7.4.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for affected processes, as follows. Such notifications shall include a description of each deviation and a discussion of the probable cause of such deviation, any corrective actions taken, and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act.

- i. For those breakdown or malfunction PM and opacity events that require notification and reporting pursuant to Condition 7.4.10(b)(i), notification and reporting shall be provided pursuant to Condition 7.4.10(b)(i) rather than 7.4.10(a).
 - ii. Within 30 days after the conclusion of an incident in which the Permittee continued to operate an affected process for more than 12 operating hours after discovering that emission control measures required by the record identified in Condition 7.4.9(b)(i) were not present or operating, the Permittee shall submit written notice to the Illinois EPA. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.4.9(e).
 - iii. A. Except for events and incidents for which notification or reporting is required by Condition 7.4.10(a)(ii) or 7.4.10(b)(i), as referenced in 7.4.10(a)(i), all other notifications shall be submitted with the quarterly reports required by Condition 7.4.10(b)(ii).

B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in prior notifications and reports for such deviations.
- b. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA for incidents when operation of an affected process(es) continued with excess emissions or excess opacity during malfunction or breakdown as addressed by Condition 7.4.3(b).

- i. A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile or electronic mail, for each incident in which the opacity from an affected process exceeds 30 percent for eight or more 6-minute averaging periods within a two-hour period unless the Permittee has begun the shutdown of the affected process(es) by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods within a two-hour period or the Permittee has begun the shutdown of the affected process(es) by such time, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.4.10(b)(ii).)

- B. Upon conclusion of each incident that is two hours or more in duration, the Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a copy of the records for the incident required by Condition 7.4.9(e).
- ii. The Permittee shall submit quarterly reports to the Illinois EPA that include the following information for incidents during the quarter in which affected processes continued to operate during malfunction or breakdown with excess emissions or excess opacity. These reports shall be submitted with the quarterly reports submitted for the coal-fired boilers pursuant to Condition 7.1.10-2(a).
 - A. A listing of such incidents, in chronological order, that includes:
 - I. The date, time, and duration of each incident.
 - II. The identity of the affected process(es) involved in the incident.
 - III. Whether a follow-up notice was submitted for the incident pursuant to Condition 7.4.10(b)(i)(B), with the date of the notice.
 - B. A description of the incident, discussion of probable cause of the incident, corrective actions taken, and any preventative measures taken; provided, however, that the Permittee need not resubmit information provided in a prior report for an incident, as identified above, but may elect to supplement the prior submittal.
 - C. The sum duration of all incidents during the quarter.
 - D. If there have been no such incidents during the calendar quarter, this shall be stated in the report.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected processes without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (1) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as

applicable, or for an activity for which a permit is required pursuant to 35 IAC 201.142.

- a. Operation of additional dust collection equipment.
- b. Operation of replacement dust collection equipment that is of equal or greater effectiveness in controlling visible emissions than the device(s) being replaced, as recognized in a construction permit for such equipment.

7.4.12 Compliance Procedures

- a. Compliance with Condition 7.4.4 is addressed by the observations, inspections, and recordkeeping required by Conditions 7.4.7, 7.4.8, and 7.4.9, respectively.
- b. Compliance with Condition 7.4.6 is addressed by the inspections and recordkeeping required by Conditions 7.4.8 and 7.4.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

7.5 Auxiliary Boiler

7.5.1 Description

The Permittee operates a 130 mmBtu/hr distillate oil fired boiler used to produce steam for auxiliary support and for space heating purposes. Propane is used as a startup fuel for the auxiliary boiler but the auxiliary boiler is not co-fired with propane.

Note: The description in Condition 7.5.1 is for informational purposes only and implies no limits or constraints.

7.5.2 List of Emission Units and Air Pollution Control Equipment

Unit	Description	Control Equipment
Auxiliary Boiler	Distillate Oil Fired (1968)	None

7.5.3 Applicability Provisions

- a. The "affected boiler" for the purpose of these unit-specific conditions is the boiler described in Conditions 7.5.1 and 7.5.2.

b. Startup Provisions

Subject to the following terms and conditions, the Permittee is authorized to operate the affected boiler in violation of the applicable standards identified or cross-referenced of Condition 5.2.2(b) (35 IAC 212.123), Condition 7.5.4(b) (35 IAC 212.206), and Condition 7.5.4(d) (35 IAC 216.121) during startup. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally describing the efforts that will be used "...to minimize startup emissions, duration of individual startups and frequency of startups."

- i. This authorization does not relieve the Permittee from the continuing obligation to demonstrate that all reasonable efforts are made to minimize startup emissions, duration of individual startups and frequency of startups.
- ii. The Permittee shall conduct startup of the affected boiler in accordance with written procedures prepared by the Permittee and maintained in the control room for the boiler, that are specifically developed to minimize emissions from startups.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.5.9(a) and (c) and 7.5.10(b)(ii).
- iv. As provided by 35 IAC 201.265, an authorization in a permit for excess emissions during startup does not shield

a Permittee from enforcement for any violation of applicable emission standard(s) that occurs during startup and only constitute a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

c. Malfunction and Breakdown Provisions

Subject to the following terms and conditions, the Permittee is authorized to continue operation of the affected boiler in violation of the applicable standards identified or cross-referenced of Condition 5.2.2(b) (35 IAC 212.123), Condition 7.5.4(b) (35 IAC 212.206), and Condition 7.5.4(d) (35 IAC 216.121) in the event of a malfunction or breakdown of the affected boiler. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

- i. This authorization only allows such continued operation as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable repair the affected boiler, remove the affected boiler from service or undertake other action so that excess emissions cease.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.5.9(a) and (d) and 7.5.10(b)(iii) and (c). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the boiler out of service.
- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.

- v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.5.4 Applicable Emission Standards

- a. The standard that addresses opacity of the emission of smoke or other particulate matter from the affected boiler is set forth in Condition 5.2.2(b).
- b. The emissions of PM from the affected boiler shall not exceed 0.10 lb/mmBtu of actual heat input in any one hour period, pursuant to 35 IAC 212.206.
- c. Intentionally Blank
- d. The emissions of CO from the affected boiler shall not exceed 200 ppm, corrected to 50 percent excess air, pursuant to 35 IAC 216.121.
- e. Pursuant to Construction Permit 13110057, the affected boiler shall only be subject to the requirements in the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD, that apply to "limited-use" units.

7.5.5 Non-Applicability of Regulations of Concern

- a. The affected boiler is not subject to the requirements of 40 CFR 63 Subpart DDDDD for units in the "unit designed to burn liquid subcategory" because the annual capacity factor of the affected boiler is limited to less than 10 percent and the affected boiler will be a "limited-use boiler or process heater" as defined by 40 CR 63.7575.

Note: As a limited use boiler, the affected boiler is only subject to certain work practice standards and associated recordkeeping and reporting requirements in 40 CFR 83 Subpart DDDDD.

- b. The affected boiler is not subject to the requirements in NESHAP for Coal- and Oil-Fired Electric Utility Steam Generating Units, 40 CFR 63 Subpart UUUUU because the affected boiler is not an electrical steam generating unit.
- c. The affected boiler is not subject to the requirements in 40 CFR 60 Subpart Db because the boiler was operational prior to

June 19, 1984 and has not been modified or reconstructed since initial installation in 1968.

- d. The affected boiler is not subject to the requirements in 35 IAC 217 Subpart D and E, which establish emission limitations and other requirements for certain boilers that reflect use of Reasonably Available Control Technology for emissions of NO_x, because potential NO_x emissions of the affected boiler are limited to below the applicability thresholds in 35 IAC 217.150(a)(1)(B) and 35 IAC 217.162 of 15 tons per year and 5 tons per ozone season (See Condition 7.5.6(b)(ii) - Emission Limitations for NO_x).
- e. The affected boiler is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for any criteria pollutants because the affected boiler does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.5.6 Work Practices, Operational and Production Limits, and Emission Limitations

- a.
 - i. Pursuant to 40 CFR 63 Subpart DDDDD, the Permittee shall comply with the applicable work practice requirements for a "limited use" boiler.
 - ii. Pursuant to Section 39.5(7)(a) of the Act, distillate fuel oil shall be the only fuel fired in the affected boiler.
 - iii. Pursuant to 35 IAC 214.161(b)(2), the sulfur content of all distillate fuel oil used by the affected boiler must not exceed 15 ppm.
- b. The Permittee shall comply with the following limitations and requirements for the affected boiler:
 - i. Operational Limitations: [T1]
 - A. The fuel usage in each calendar year shall not exceed 800,000 gallons.
 - B. The fuel usage in each ozone season (i.e., the period from May 1 through September 30 of a year) shall not exceed 400,000 gallons.
 - C. The average annual capacity factor of the affected boiler shall not exceed 10 percent, so that the boiler qualifies as a "limited-use boiler or process heater," as defined by 40 CFR 63.7575. For this purpose, "average annual capacity factor" shall mean the "annual capacity factor" as defined by 40 CFR 63.7575.

- ii. Emission Limitations for NO_x: [T1]
 - A. The NO_x emissions in each calendar year shall not exceed 9.6 tons.
 - B. The NO_x emissions in each ozone season shall not exceed 4.8 tons.

iii. Instrumentation Requirements: [T1]

The Permittee shall maintain and operate a fuel flowmeter on the affected boiler in a manner consistent with good air pollution control practices, including operation and calibration of this device in accordance with the manufacturer's written recommendations or written procedures prepared by the Permittee.

Note: The above limitations and requirements were established in Construction Permit 13110057.

7.5.7-1 Opacity Observation and Emission Testing Requirements

- a. The Permittee shall have the opacity of the emissions from the affected boiler during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.
 - i. A. Opacity observations shall be conducted within the first 500 hours of operation of the boiler after the effectiveness of this Condition 7.5.7-1(a). For every calendar year after the first observation is conducted, opacity observations shall be conducted on an annual basis, unless the boiler operates for less than 500 hours in the calendar year.
 - B. Upon written request by the Illinois EPA, such testing shall be conducted within 45 calendar days of the request, or on the date that the affected boiler next operates, or on the date agreed upon by the Illinois EPA, whichever is latest.
- ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are each not greater than 10.0 percent.
- iii. A. For each set of opacity observations required by Condition 7.5.7-1(a)(i)(A) and (B) the Permittee shall notify the Illinois EPA at least 5 days in advance of the date of the first observation(s). This notification shall include the name and employer of the observer(s) and identify any concerns for successful completion of

observations, i.e., lack of suitable point for proper observation or inability to conduct observations under specified operating conditions. This condition supersedes the requirements of Condition 8.6.2.

- B. The Permittee shall promptly notify the Illinois EPA of any changes in the date of the first observation(s).
- iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observations, if Illinois EPA personnel are present.
- v. The Permittee shall submit a written report for these observations not later than 30 days after the date of completion of each set of opacity observations required by Conditions 7.5.7-1(a)(i)(A) and (B). This report shall include a copy of the current Reference Method 9 certification of each observer and shall identify the observer's current employer. This report shall also include the following for each observation:
 - A. Identification of the affected boiler.
 - B. Date and time of observations.
 - C. Description of observation conditions, including recent weather.
 - D. Detailed description of the operating conditions of the affected boiler during the observations, including fuel consumption (gal/hr) and firing rate (mmBtu/hr).
 - E. Raw data.
 - F. Opacity determinations.
 - G. Conclusions.
- b. The Permittee shall have the PM, CO and NOx emissions of the affected boiler measured during representative operating conditions, as further specified below, pursuant to Section 39.5(7)(d) of the Act.
 - i. A. Measurements shall be conducted by the end of the second full calendar year of operation after the effective date of this Condition 7.5.7-1(b); and
 - B. Measurements shall be conducted within 90 days of a written request from the Illinois EPA.
 - ii. A. Testing shall be conducted using appropriate Reference Test Methods, including Methods 5, 10

and 7 or 19 for PM, CO and NOx emissions, respectively.

- B. Compliance may be determined from the average of three valid test runs, subject to the limitations and conditions contained in 35 IAC Part 283.
- iii. The Permittee shall submit a test plan as required by Condition 8.6.2.
- iv. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may, at its discretion, accept notification with shorter advance notice provided that the Illinois EPA will not accept such notification if it interferes with the Illinois EPA's ability to observe the testing.
- v. The Permittee shall submit the Final Report(s) for any required emission testing to the Illinois EPA within 45 days after the tests results are compiled and finalized but no later than 120 days after the date of testing. The Final Report shall include the information specified in Condition 8.6.3 and the following information:
 - A. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.
 - B. Detailed description of the operating conditions of the affected boiler during testing, including fuel consumption (gal/hr), firing rate (mmBtu/hr), and combustion system information, i.e., settings for distribution of combustion air, target level for O₂ in the flue gas, and levels of O₂ in the flue gas, as determined by diagnostic measurements.
 - C. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
 - D. Opacity data (6-minute and hourly averages) monitored during testing.

7.5.7-2 Intentionally Blank

7.5.8 Emission Monitoring Requirements

- a. Fuel Flow Monitoring

Pursuant to Section 39.5(7)(b) of the Act, a fuel flowmeter shall be used for the affected boiler to facilitate determinations of compliance with the limits on the operation and emissions of the affected boiler in Condition 7.5.6(b).

7.5.9 Recordkeeping Requirements

- a. The Permittee shall maintain the following records for the affected boiler, pursuant to Sections 39.5(7)(a) and (e) of the Act.
 - i. Operating records for the affected boiler that include the following information:
 - A. Date and time of each shutdown of the affected boiler.
 - B. Information identifying any deviation from the fuel restriction in Condition 7.5.6(a)(ii).
 - ii. Records of testing completed as required by Condition 7.5.7-1(b).
 - iii
 - A. Records for fuel usage for the affected boiler, gallons/month and gallons/year.
 - B. Records for operating hours (hours/quarter)
- b. Pursuant to 40 CFR 63 Subpart DDDDD, the Permittee shall comply with the applicable recordkeeping requirements for a "limited use" boiler.
- c. Records for Startups of the affected boiler, pursuant to Section 39.5(7)(b) of the Act:
 - i. The Permittee shall maintain written startup procedures for the affected boiler as required by Condition 7.5.3(b)(ii).
 - ii. The Permittee shall maintain the following records related to startup of the affected boiler:
 - A. For all startups of the affected boiler:
 - I. Date, time, and duration of the startup.
 - II. A description of the startup, the reason(s) for the startup, and an indication of whether or not written startup procedures were followed. If any procedures were not followed, the records shall include any departures from established procedures and the reason the procedure could not be followed.

- B. For each startup when the duration of startup from initial firing of fuel to stable operation of the affected boiler with systems operating to enable compliance with the applicable standards for opacity and emissions of PM and CO is more than 60 minutes, maintain the following additional records for such startups
 - I. An explanation of why startup was not completed sooner.
 - II. An explanation of whether opacity, or PM or CO emissions during startup exceeded an applicable standard, as identified or cross-referenced in Condition 7.5.4, or the Permittee believes that compliance with that standard during startup likely was not maintained.
- d. Records for Continued Operation During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (e) of the Act, the Permittee shall maintain the following records related to malfunction and breakdown of the affected boiler:

- i. Maintenance and repair records for the affected boiler that address aspects or components of the boiler for which malfunction or breakdown has resulted in excess emissions, which shall list the activities performed on such aspects or components, with date, description and reason for the activity.
- ii. Records for each incident when operation of the affected boiler continued with excess emissions during malfunction or breakdown as addressed by Condition 7.5.3(c), that shall include the following information:
 - A. Date, time, duration (i.e., the length of time during which operation continued with excess opacity or emissions until corrective actions were taken or the boiler was taken out of service) and description of the incident.
 - B. The corrective actions used to reduce the quantity of emissions and to reduce the duration of the incident.
 - C. Confirmation of fulfillment of the requirements of Condition 7.5.10(c), as applicable, including copies of any follow-up reports submitted pursuant to Condition 7.5.10(c)(ii).
 - D. If opacity or emissions of PM or CO exceeded an applicable standard, as listed in Condition 7.5.4,

or the Permittee believes that compliance with the standard likely was not maintained:

- I. A detailed explanation of:
 - a. Why continued operation of the affected boiler was necessary, and
 - b. The probable cause of the incident.
 - II. The preventative measures that have been or will be taken to prevent similar incidents or reduce their frequency and severity, including any repairs to the affected boiler and associated equipment and any changes to operating and maintenance procedures.
- e. Pursuant to Sections 39.5(7)(a) and (e) of the Act, the Permittee shall keep records for all opacity observations made in accordance with Reference Method 9 for the affected boiler that the Permittee conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.5.7-1(a), or otherwise the identity of the observer, a description of the various observations that were made, the operating condition of the affected boiler, the observed opacity, and copies of the raw data sheets for the observations.
 - f. Pursuant to 35 IAC 214.161(b)(3)(A) and (B), the Permittee shall maintain records demonstrating that the fuel oil used in the affected boiler complies with the requirements of Condition 7.5.6(a)(iii), such as records from the fuel supplier indicating the sulfur content of the fuel oil. The Permittee shall provide copies of the records to the Illinois EPA not later than 30 days after receipt of a request by the Illinois EPA.
 - g. Pursuant to Construction Permit 13110057, the Permittee shall maintain the following additional records:
 - i. Records of the following information for the affected boiler on a seasonal and calendar year basis:
 - A. NO_x emissions (tons), with supporting data and calculations.
 - ii. Documentation for the maximum steady state design heat input capacity of the affected boiler if this information is not provided on the name plate affixed to it by the manufacturer or if the information on the name plate is no longer correct.
 - iii. Records of the heat content of the fuel used in the boiler, with supporting documentation.

- iv. By March 1 of each year, records for the actual annual capacity factor of the affected boiler during the preceding calendar year (percent), with supporting data and calculations.

7.5.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for the affected boiler, as follows. Such notifications shall include a description of each deviation, including whether it occurred during startup or malfunction/breakdown, and a discussion of the probable cause of such deviations, any corrective actions taken and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act.

- i. For those breakdown or malfunction opacity, PM or CO events that require notification and reporting pursuant to in Condition 7.5.10(c), notification and reporting shall be provided pursuant to Condition 7.5.10(c) rather than Condition 7.5.10(b).
- ii. Notification with the quarterly reports required by Condition 7.5.10(b) for deviations from Conditions 7.5.4(a), (b) and (d) unless notification and reporting for that deviation is required pursuant to Condition 7.5.10(c).
- iii. Notification with the quarterly reports required by Condition 7.5.10(b) for deviations from other applicable emission standards, work practice requirements, and recordkeeping requirements.

b. Quarterly Reports

In place of the semi-annual monitoring reports otherwise required by Condition 8.6.1, the Permittee shall submit quarterly reports to the Illinois EPA that include the following information, pursuant to Sections 39.5(7)(a) and (f) of the Act. These reports shall be submitted with the quarterly reports submitted for the coal-fired boilers pursuant to Condition 7.1.10-2(a).

- i. For operation of the affected boiler during the quarter:
 - A. The total operating hours for the affected boiler.
 - B. Annual capacity factor over the previous 12 months for the affected boiler.
 - C. Certification that the only oil that was combusted in the affected boiler during the reporting period

was meeting the sulfur content limitation in Condition 7.5.6(a)(iii).

- D. A discussion of significant changes in the fuel supply to the affected boiler, if any.
- E. The amount of fuel burned in the affected boiler (gallons).

ii. For startups of the affected boiler during the quarter:

- A. A listing of each startup, including date, description and duration, accompanied by a copy of the records maintained pursuant to Condition 7.5.9(c)(ii)(B) for each startup for which such records were required.
- B. If there have been no startups of the affected boiler during the quarter, this shall be stated in the report.

iii. For incidents during the quarter in which the affected boiler continued to operate during malfunction or breakdown with excess emissions or excess opacity.

- A. A listing of such incidents, in chronological order, that includes:
 - I. The date, time, and duration of each incident, and
 - II. Whether a follow-up notice was submitted for the incident pursuant to Condition 7.5.10(c)(ii), with the date of the notice.
- B. A description of the incident, discussion of probable cause of the incident, corrective actions taken, and any preventative measures taken; provided, however, that the Permittee need not resubmit information provided in a prior report for an incident, as identified above, but may elect to supplement the prior submittal.
- C. The sum duration of all incidents during the quarter.
- D. If there have been no such incidents during the calendar quarter, this shall be stated in the report.

c. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA, Compliance

Section and Regional Office, for incidents when operation of the affected boiler continued with excess emissions or excess opacity during malfunction or breakdown as addressed by Condition 7.5.3(c). These requirements do not apply to operation with excess opacity or excess emissions, if any, that occur during startup of the affected boiler.

- i. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile or electronic mail for each incident in which opacity from the affected boiler exceeds 30 percent for eight or more 6-minute averaging periods within a two-hour period unless the Permittee has begun the shutdown of the affected boiler by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods within a two-hour period or the Permittee has begun the shutdown of the affected boiler by such time, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.5.10(b).)
 - ii. Upon conclusion of each incident for which the applicable PM emission standard was exceeded or in which an exceedance of the opacity standard was two hours or more in duration, the Permittee shall submit a follow-up report to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a copy of the records for the incident required by Condition 7.5.9(d)(ii)(A), (B) and (D).
- d. Pursuant to 35 IAC 214.161(c)(3)(C), the Permittee shall notify Illinois EPA within 30 days after discovery for deviations from fuel oil sulfur requirement in Condition 7.5.6(a)(iii).

7.5.11 Intentionally Blank

7.5.12 Compliance Procedures

- a. Compliance with the opacity standard cross-referenced in Condition 7.5.4(a) is addressed by observations and recordkeeping required by Conditions 7.5.7-1(a) and 7.5.9, respectively.
- b. Compliance with the PM limit of Condition 7.5.4(b) is addressed by the work practices required by Condition 7.5.6(a)(ii), testing in accordance with Condition 7.5.7-1(b) and the recordkeeping required by Condition 7.5.9.
- c. Intentionally Blank
- d. Compliance with the CO limit of Condition 7.5.4(d) is addressed by the testing and recordkeeping required by Conditions 7.5.7-1(b) and 7.5.9, respectively.

- e. Compliance with Condition 7.5.6 is addressed by the recordkeeping required by Condition 7.5.9.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

7.6 Gasoline Storage Tank

7.6.1 Description

The 1,000-gallon capacity aboveground storage tank with submerged loading pipe is associated with non-retail dispensing of gasoline for plant vehicles and equipment.

Note: The description in Condition 7.6.1 is for informational purposes only and implies no limits or constraints.

7.6.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Tank	Gasoline Storage Tank, with Submerged Loading Pipe	None

7.6.3 Applicability Provisions

The "affected storage tank" for the purpose of these unit-specific conditions is the storage tank described in Conditions 7.6.1 and 7.6.2.

7.6.4 Applicable Emission Standards

- a. The affected storage tank is subject to 35 IAC 215.122(b) and 215.583(a)(1), which provide that:
 - i. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe or satisfies one of several other compliance options as specified in 35 IAC 215.122(b).
 - ii. No person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank at a gasoline dispensing facility unless the tank is equipped with a submerged loading pipe [35 IAC 215.583(a)(1)].

7.6.5 Non-Applicability of Regulations of Concern

- a. The affected storage tank is not subject to the New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels), 40 CFR Part 60, Subpart Kb, because the capacity of the tank is less than 40 cubic meters (10,566 gallons).
- b. The affected storage tank is not subject to 35 IAC 215.121 or 35 IAC 215.122(a) because the capacity of the tank is less than 40,000 gallons.

- c. The requirements of 35 IAC 215.583(a)(2) do not apply to transfer of gasoline to the affected storage tank because the affected storage tank is located in Randolph County. [35 IAC 215.583(b)]
- d. The affected storage tank is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for VOM because the affected storage tank does not use add-on controls to achieve compliance with an applicable emission limitation or standard.
- e. The affected storage tank is not subject to the National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities, 40 CFR Part 63, Subpart CCCCCC, because the gasoline storage tank is not located at an Area Source for Hazardous Air Pollutants.

7.6.6 Operational and Emission Limitations

- a. Pursuant to Condition 7.6.4(a) (35 IAC 215.122(b) and 215.583(a)(1)), the affected storage tank shall be equipped, operated and maintained with a submerged loading pipe or an equivalent device approved by the Illinois EPA. (The Illinois EPA has not approved use of other equivalent equipment in lieu of a submerged loading pipe.)
- b. Pursuant to Construction Permit 11060042: [T1]
 - i. The capacity of the affected storage tank shall not exceed 1,100 gallons.
 - ii. The throughput of the affected storage tank shall not exceed 24,000 gallons of gasoline per calendar year.
 - iii. Emissions of VOM from the affected storage tank shall not exceed 1.1 tons/year.

7.6.7 Intentionally Blank

7.6.8 Inspection Requirements

Not later than May 1st of each calendar year, the Permittee shall conduct an inspection of the affected storage tank to review its physical condition and ability to comply with the applicable equipment and operational requirements of Condition 7.6.6(a), pursuant to Sections 39.5(7)(a) and (d) of the Act.

7.6.9 Recordkeeping Requirements

The Permittee shall maintain records of the following for the affected storage tank, pursuant to Section 39.5(7)(a) and (e) of the Act:

- a. Design information for the capacity of the tank and the presence of a permanent submerged loading pipe.

- b. Operating records for the affected storage tank that shall include the following:
 - i. Information documenting performance of the inspections that are required by Condition 7.6.8, including date and description of the inspection, confirmation of the adequacy of the specific features of the tank required for control of emissions, and identification of any such features that are not in proper working order or otherwise deficient, with recommendations for maintenance, repair or replacement.
 - ii. Information identifying deviations from applicable equipment requirements, with a detailed description and explanation.
- c. Maintenance and repair records for the affected storage tank, as related to the repair or replacement of the loading pipe.
- d. Throughput of material, gal/mo and gal/yr, by type of material.
- e. Emissions of VOM from the affected storage tank in tons/month and tons/year.

7.6.10 Reporting Requirements

For the affected storage tank, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as follows. Such notifications shall include a description of each deviation and a discussion of the probable cause of deviation, any corrective actions taken and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act:

- a. The Permittee shall submit written notice to the Illinois EPA within 30 days after any filling of the affected storage tank that was not in compliance with the requirements of Conditions 7.6.4 or 7.6.6, i.e., that was conducted without a submerged loading pipe.
- b. The Permittee shall notify the Illinois EPA through the quarterly reports required for the coal-fired boilers by Condition 7.1.10-2(a) for deviations from applicable recordkeeping requirements.

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational changes with respect to the affected storage tank without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as

applicable, or for an activity constituting construction or modification as defined in 35 IAC 201.102.

- a. Changes to components related to the submerged loading pipe, including addition of new components and repair and replacement of components.
- b. Changes in the material stored in the affected storage tank.

7.6.12 Compliance Procedures

- a. Compliance with Conditions 7.6.4(a) is addressed by the use of a submerged loading pipe as required in Condition 7.6.6(a) and by the inspections and recordkeeping required by Condition 7.6.8 and 7.6.9, respectfully.
- b. Compliance with Condition 7.6.6 is addressed by the inspections and recordkeeping required by Conditions 7.6.8 and 7.6.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is an affected source under Title IV of the CAA and is subject to requirements pursuant to Title IV of the CAA as specified in Section 6.2 of this permit. To the extent that the federal regulations promulgated under Title IV of the CAA, are inconsistent with the requirements of this permit, the federal regulations promulgated under Title IV of the CAA shall take precedence pursuant to Section 39.5(17)(j) of the Act.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;

- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
 - i. Describe the physical or operational change;
 - ii. Identify the schedule for implementing the physical or operational change;
 - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
 - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
 - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the condition of this permit. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Conditions 8.6.3 and 8.6.4.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

Reports summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Illinois EPA every six months as follows, unless more frequent submittal of such reports is required in Section 7 of this permit [Section 39.5(7)(f) of the Act]:

Monitoring PeriodReport Due Date

January - June

September 1

July - December

March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determinations of emissions and operation that are intended to be made, including sampling and monitoring locations;
- e. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and
- g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;

- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests and/or analyses, with raw data and sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

- a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.
- b. As of the date of issuance of this permit, the addresses of the offices that should generally be utilized for the submittal of reports and notifications are as follows:

- i. Illinois EPA - Air Compliance Section

- Illinois Environmental Protection Agency
Bureau of Air
Compliance & Enforcement Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276

OR

- Illinois Environmental Protection Agency
Bureau of Air
Compliance & Enforcement Section (MC 40)
1021 North Grand Avenue East
Springfield, Illinois 62702

- ii. Illinois EPA - Air Regional Field Office

- Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

- iii. USEPA Region 5 - Air Branch

- USEPA (AR - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604

- c. Permit applications should be addressed to the Air Permit Section. As of the date of issuance of this permit, the address of the Air Permit Section is as follows:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

OR

Illinois Environmental Protection Agency
Division of Air Pollution Control
Air Permit Section (MC 11)
1021 North Grand Avenue East
Springfield, Illinois 62702

8.7 Title I Conditions

Notwithstanding the expiration date on the first page of this CAAPP permit, Title I conditions in this permit, which are identified by a T1, T1N, or T1R designation, remain in effect until such time as the Illinois EPA takes action to revise or terminate them in accordance with applicable procedures for action on Title I conditions. This is because these conditions either: (a) incorporate conditions of earlier permits that were issued by the Illinois EPA pursuant to authority that includes authority found in Title I of the Clean Air Act (T1 conditions), (b) were newly established in this CAAPP permit pursuant to authority that includes such Title I authority (T1N conditions), or (c) reflect a combination of conditions of such previous permits and revisions to those conditions established in this CAAPP permit (T1R conditions). (See also Condition 1.5.)

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule. [Section 39.5(7)(j)(iv) of the Act]

9.1.2 In particular, this permit does not alter or affect the following:

- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance with, or violation of, any applicable requirement to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the Permittee, including, but not limited to, challenging the use of the USEPA's credible evidence rule in the context of any future proceeding consistent with *Clean Air Implementation Project v. EPA*, 150 F3d 1200 (D.C. Circuit 1998).

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless this permit provides for such continued operation consistent with the Act and applicable Board regulations. [Section 39.5(6)(c) of the Act]

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.3 Obligation to Allow Illinois EPA Surveillance

Pursuant to Sections 4(b), 39.5(7)(a), and 39.5(7)(p)(ii) of the Act, upon presentation of credentials and other documents as may be required by law and in accordance with constitutional limitations, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following.

- a. Enter upon the Permittee's premises where the emission unit(s) are located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit.
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.
- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
- d. Sample or monitor any substances or parameters at any location:
 - i. As authorized by the Clean Air Act, at reasonable times, for the purposes of assuring compliance with this CAAPP permit or applicable requirements; or
 - ii. As otherwise authorized by the CAA or the Act.
- e. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

9.4 Fees

The Permittee shall pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto. [Section 39.5(7)(o)(vi) of the Act] Fees shall be paid by check sent to one of the following two addresses:

Illinois Environmental Protection Agency
Fiscal Services Section
1021 North Grand Avenue East
Springfield, IL 62702

OR

Illinois Environmental Protection Agency
Fiscal Services Section
P.O. Box 19276
Springfield, IL 62794-9276

9.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege. [Section 39.5(7)(o)(iv) of the Act]

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes. [Section 39.5(12)(b)(iv) of the Act]

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [Section 39.5(7)(e)(ii) of the Act]
- b. Other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Air Quality Planning Section no later than May 1 of the following year, as required by 35 IAC Part 254 and Section 4(b) of the Act.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to: (1) the Illinois EPA, Air Compliance Section, and (2) the Illinois EPA, Air Regional Field Office. (The addresses for the submittal of these compliance certifications are provided in Condition 8.6.4.)

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- b. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act. [Section 39.5(7)(p)(i) of the Act] An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating records, or other relevant evidence:
 - i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency;

Note: For this purpose, emergency means a situation arising from sudden and reasonably unforeseeable events beyond the control of the source, as further defined by Section 39.5(7)(k)(iv) of the Act.

- ii. The permitted source was at the time being properly operated;
 - iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
 - iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, revoked, reopened and reissued, or terminated for cause in accordance with applicable provisions of Section 39.5 of the Act. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation and reissuance under Section 39.5(15) of the Act, pursuant to Sections 39.5(5)(e) and (i) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, other portions of this permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and the rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of this CAAPP permit will remain

in effect until the issuance of a renewal permit. [Sections 39.5(5)(l) and (o) of the Act]

Note: Pursuant to Sections 39.5(5)(h) and (n) of the Act, upon submittal of a timely and complete renewal application, the permitted source may continue to operate until final action is taken by the Illinois EPA on the renewal application, provided, however, that this protection shall cease if the applicant fails to submit any additional information necessary to evaluate or take final action on the renewal application as requested by the Illinois EPA in writing. For a renewal application to be timely, it must be submitted no later than 9 months prior to the date of permit expiration.

9.15 General Authority for the Terms and Conditions of this Permit

The authority for terms and conditions of this permit that do not include a citation for their authority is Section 39.5(7)(a) of the Act, which provides that the Illinois EPA shall include such provisions in a CAAPP permit as are necessary to accomplish the purposes of the Act and to assure compliance with all applicable requirements. Section 39.5(7)(a) of the Act is also another basis of authority for terms and conditions of this permit that do include a specific citation for their authority.

Note: This condition is included in this permit pursuant to Section 39.5(7)(n) of the Act.

10.0 ATTACHMENTS

10.1 Attachment 1 Emissions of Particulate Matter from New Process Emission Units

35 IAC 212.321 - Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972

- a) Except as further provided in this Part, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.
- b) Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

$$E = A(P)^B$$

where

P = Process weight rate; and

E = Allowable emission rate; and,

- 1) Up to process weight rates of 408 MG/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

- 2) For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

- c) Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40

0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and

E = Allowable emission rate in kg/hr or lbs/hr.

10.2 Attachment 2 Emissions of Particulate Matter from Existing Process Emission Units

35 IAC 212.322 - Process Emission Units for Which Construction or Modification Commenced Prior to April 14, 1972

- a) Except as further provided in this Part, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.
- b) Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and

E = allowable emission rate; and,

- 1) For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

- 2) For process weight rates in excess of 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

- c) Limits for Process Emission Units for Which Construction or Modification Commenced Prior to April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10

1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and

E = Allowable emission rate in kg/hr or lbs/hr.

10.3 Attachment 3 Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

10.4 Attachment 4 Guidance

The Illinois has prepared guidance for sources on the Clean Air Act Permit Program (CAAPP) that is available on the Internet site maintained by the Illinois EPA, www.epa.state.il.us. This guidance includes instructions on applying for a revision or renewal of the CAAPP permit.

Guidance on Revising A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-revising.pdf

Guidance on Renewing A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-renewing.pdf

The application forms prepared by the Illinois EPA for the CAAPP are also available from the Illinois EPA's Internet site:

www.epa.state.il.us/air/caapp/index.html

These CAAPP application forms should also be used by a CAAPP source when it applies for a construction permit. For this purpose, the appropriate CAAPP application forms and other supporting information, should be accompanied by a completed Application for A Construction Permit Form (CAAPP Form-199).

Application for A Construction Permit Form (CAAPP Form-199):

www.epa.state.il.us/air/caapp/199-caapp.pdf

10.5 Attachment 5 Acid Rain Program Permit

217-785-1705

Renewal ACID RAIN PROGRAM
PERMIT

Dynegy Midwest Generation, LLC
 Attn: John Cooley, Designated Representative
 1500 Eastport Plaza Drive
 Collinsville, Illinois 62234

Oris No.: 889
 IEPA I.D. No.: 157851AAA
 Source/Unit: Baldwin Energy Complex/ Units 1, 2 and 3
 Date Received: December 10, 2009
 Date Issued: June 21, 2018
 Expiration Date: June 21, 2023

STATEMENT OF BASIS:

In accordance with Section 39.5(17) of the Illinois Environmental Protection Act and Titles IV and V of the Clean Air Act, the Illinois Environmental Protection Agency is issuing this Acid Rain Program permit, including requested revisions, to Dynegy Midwest Generation, LLC for its Baldwin Energy Complex.

SULFUR DIOXIDE (SO₂) ALLOCATIONS AND NITROGEN OXIDES (NO_x) LIMITS FOR EACH AFFECTED UNIT:

UNIT 1	SO ₂ Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73*	2017 and Beyond
		18,146
	NO _x Limit	0.86 lb/mmBtu (Standard Limit for Cyclone Fired Boilers)

UNIT 2	SO ₂ Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73*	2017 and Beyond
		19,186
	NO _x Limit	0.86 lb/mmBtu (Standard Limit for Cyclone Fired Boilers)

UNIT 3	SO ₂ Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73*	2017 and Beyond
		18,380
	NO _x Limit	0.45 lb/mmBtu (Standard Limit for Phase I Tangentially Fired Boilers)

- * Also includes return of repowering deduction of 7 allowances for each unit, which were returned by USEPA on October 30, 2000.

PERMIT APPLICATION: The permit application, including the NOx compliance plan, is attached and incorporated as part of this permit. The Permittee must comply with the standard requirements and special provisions set forth in the application.

COMMENTS, NOTES, AND JUSTIFICATIONS: This permit contains provisions related to sulfur dioxide (SO₂) emissions and requires the Permittee to hold SO₂ allowances under the federal Acid Rain Program to account for SO₂ emissions from the affected units. An allowance is a limited authorization to emit up to one ton of SO₂ during or after a specified calendar year. The transfer of allowances to and from a unit account does not necessitate a revision to the unit SO₂ allocations denoted in this permit (See 40 CFR 72.84).

This permit contains provisions related to NOx emissions requiring affected units to comply with applicable emission limitations for NOx under the Acid Rain Program. In addition to the described NOx compliance plan, each affected unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NOx compliance plan, and requirements covering excess emissions.

This permit does not affect the source's responsibility to meet all other applicable local, state and federal requirements, including state requirements under 35 Ill. Adm. Code Part 217 Subpart V, which addresses NOx emissions from Baldwin Units 1, 2, and 3.

If you have any questions regarding this permit, please contact the CAAPP Unit at 217/785-1705.

Raymond E. Pilapil
Manager, Permits Section
Bureau of Air

REP:MTR:DLR:jlpl

cc: USEPA Region V
Illinois EPA, FOS, Region 3



United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258

Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: ☐ new ☐ revised ☒ for Acid Rain permit renewal

STEP 1

Identify the facility name, State, and plant (ORIS) code.

Baldwin Power Plant	IL	889
Facility (Source) Name	State	Plant Code

STEP 2

Enter the unit ID#
for every affected
unit at the affected
source in column "a."

[illegible]

Baldwin Power Plant
Facility (Source) Name (from STEP 1)

Acid Rain - Page 2

Permit Requirements

STEP 3

Read the standard requirements.

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

Facility (Source) Name (from STEP 1) Baldwin Power Plant

Sulfur Dioxide Requirements. Cont'd.

STEP 3, Cont'd.

- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
- (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
- (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;

Acid Rain - Page 4

Facility (Source) Name (from STEP 1) Baldwin Power Plant

Recordkeeping and Reporting Requirements, Cont'd.

STEP 3, Cont'd.

- (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating

Acid Rain - Page 5

Facility (Source) Name (from STEP 1)	Baldwin Power Plant
--------------------------------------	---------------------

Effect on Other Authorities, Cont'd.**STEP 3, Cont'd.**

to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification**STEP 4**
Read the
certification
statement,
sign, and date.

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	Kenneth B. Pollmann	
Signature	<i>Kenneth B. Pollmann</i>	Date 12/7/09



United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2050-0258

Phase II NO_x Compliance Plan

Page 1 of 1

For more information, see instructions and refer to 40 CFR 75.9

This submission is: ☒ New ☐ Revised

STEP 1
Indicate plant name,
State, and ORIS code
from NADS, if applicable

Plant Name	Baldwin	IL	889
		State	ORIS Code

STEP 2

Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADS, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit.

	1	2	3			
ID#	CY	CY	T			
Type	Type	Type	Type	Type	Type	Type
(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) EPA-approved early election plan under 40 CFR 75.9 through 12/31/07 (also indicate above emission limit specified in plan)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase I dry bottom wall-fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase I tangentially fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) Standard annual average emission limitation of 0.56 lb/mmBtu (for cyclone boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(i) Standard annual average emission limitation of 0.88 lb/mmBtu (for wet bottom boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(j) NO _x Averaging Plan (include NO _x Averaging form)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(l) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO _x Averaging (check the NO _x Averaging Plan box and include NO _x Averaging form)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EPA Form 7510-28 (3-97)

Baldwin	NO _x Compliance - Page 2 Page 1 of 1
Plant Name (from Step 1)	

STEP 2, cont'd.

1	2	3			
ID#	ID#	ID#	ID#	ID#	ID#
CY	CY	T			
Type	Type	Type	Type	Type	Type

(m) EPA-approved common stack apportionment method pursuant to 40 CFR 76.17 (a)(2)(i)(C), (a)(2)(ii)(B), or (b)(2)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(n) AEL (Include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(p) Repowering extension plan approved or under review

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

STEP 3
Read the standard requirements and certification, enter the name of the designated representative, sign &

Standard Requirements

General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(a)(1)(i)). These requirements are listed in this source's Acid Rain Permit.

Special Provisions for Early Election Units

Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO_x as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(e)(3)(ii).

Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.

Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO_x for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO_x for Phase II units with Group 1 boilers under 40 CFR 76.7.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Kenneth B. Pollmann	
Name	
Signature <i>Kenneth B. Pollmann</i>	Date 12/1/09



United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258

Phase II NO_x Averaging Plan

For more information, see instructions and refer to 40 CFR 76.11

Page 1

This submission is: ☒ New ☐ Revised

Page 1 of 1

STEP 1

Identify the units participating in this averaging plan by plant name, State, and boiler ID# from NADB. In column (a), fill in each unit's applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7. In column (b), assign an alternative contemporaneous annual emissions limitation (ACEI) in lb/mmBtu to each unit. In column (c), assign an annual heat input limitation in mmBtu to each unit. Continue to page 3 if necessary.

Plant Name	State	ID#	(a) Emission Limitation	(b) ACEI	(c) Annual Heat Input Limit
Baldwin	IL	1	0.86	0.25	10,000,000
Baldwin	IL	2	0.86	0.25	10,000,000
Baldwin	IL	3	0.45	0.30	10,000,000
Havana	IL	9	0.46	0.30	10,000,000
Hennepin	IL	1	0.40	0.35	2,000,000
Hennepin	IL	2	0.45	0.35	10,000,000
Vermilion	IL	1	0.45	0.50	9,000,000
Vermilion	IL	2	0.45	0.50	15,000,000
Wood River	IL	4	0.40	0.30	4,000,000

STEP 2

Use the formula to enter the Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan and the Btu-weighted annual average emission rate for the same units if they are operated in compliance with 40 CFR 76.5, 76.6, or 76.7. The former must be less than or equal to the latter.

Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan

0.35

Btu-weighted annual average emission rate for same units operated in compliance with 40 CFR 76.5, 76.6 or 76.7

0.54

$$\frac{\sum_{i=1}^n (R_{Li} \times HI_i)}{\sum_{i=1}^n HI_i}$$

$$\frac{\sum_{i=1}^n [R_{Li} \times HI_i]}{\sum_{i=1}^n HI_i}$$

Where,

- R_{Li} = Alternative contemporaneous annual emission limitation for unit i , in lb/mmBtu, as specified in column (b) of Step 1;
 R_{Li} = Applicable emission limitation for unit i , in lb/mmBtu, as specified in column (a) of Step 1;
 HI_i = Annual heat input for unit i , in mmBtu, as specified in column (c) of Step 1;
 n = Number of units in the averaging plan

STEP 1

[illegible]

Plant Name (from Step 1) **Baldwin**NO_x Averaging - Page 2**STEP 3**

Mark one of the two options and enter dates.

- ☒ This plan is effective for calendar year 2010 through calendar year 2014 unless notification to terminate the plan is given.
- ☐ Treat this plan as ☐ identical plans, each effective for one calendar year for the following calendar years: _____, _____, _____, _____ and _____ unless notification to terminate one or more of these plans is given.

STEP 4

Read the special provisions and certification, enter the name of the designated representative, and sign and date.

Special ProvisionsEmission LimitationsEach affected unit in an approved averaging plan is in compliance with the Acid Rain emission limitation for NO_x under the plan only if the following requirements are met:

- (i) For each unit, the unit's actual annual average emission rate for the calendar year, in lb/mmBtu, is less than or equal to its alternative contemporaneous annual emission limitation in the averaging plan, and
- (a) For each unit with an alternative contemporaneous emission limitation less stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year does not exceed the annual heat input limit in the averaging plan,
- (b) For each unit with an alternative contemporaneous emission limitation more stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year is not less than the annual heat input limit in the averaging plan, or
- (ii) If one or more of the units does not meet the requirements of (i), the designated representative shall demonstrate, in accordance with 40 CFR 76.11(d)(1)(i)(A) and (B), that the actual Btu-weighted annual average emission rate for the units in the plan is less than or equal to the Btu-weighted annual average rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations in 40 CFR 76.5, 76.6, or 76.7.
- (iii) If there is a successful group showing of compliance under 40 CFR 76.11(d)(1)(ii)(A) and (B) for a calendar year, then all units in the averaging plan shall be deemed to be in compliance for that year with their alternative contemporaneous emission limitations and annual heat input limits under (i).

Liability

The owners and operators of a unit governed by an approved averaging plan shall be liable for any violation of the plan or this section at that unit or any other unit in the plan, including liability for fulfilling the obligations specified in part 77 of this chapter and sections 113 and 411 of the Act.

Termination

The designated representative may submit a notification to terminate an approved averaging plan, in accordance with 40 CFR 72.40(d), no later than October 1 of the calendar year for which the plan is to be terminated.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name Wendell Watson	
Signature <i>Wendell Watson</i>	Date 12/8/09

10.6 Attachment 6 - Paragraphs of Consent Decree Incorporated by Reference

As provided by Condition 6.6 of this permit, the following paragraphs of the Consent Decree are incorporated by reference into this permit to the extent they apply to the Baldwin Energy Complex.

Definitions

The definitions in Paragraphs 4 through 50 of the Consent Decree to the extent the terms defined by these paragraphs are used in any of the Consent Decree paragraphs listed below or used in a definition of a term that in turn is used in one the paragraphs listed below.

Requirements Related to NOx Emissions

Paragraphs 51, 52, 54, 55, 56 and 57

Requirements Related to SO2 Emissions

Paragraphs 66, 68, 69, 73, 75, 76, 77, 78, 79, 80 and 82

Requirements Related to PM Emissions

Paragraphs 83, 84, 85, 87, 89, 90, 91, 95 and 96

Requirements for Periodic Reporting and Notice

Paragraphs 119, 123, 124, 125, 167, 168 and 169

Force Majeure Provisions

Paragraphs 137, 138, 139, 140, 141, 142, 143, 144 and 145

General Provisions

Paragraphs 182, 184 and 185

10.7 Attachment 7 - Consent Decree

(Copy of original Consent Decree in the matter of *United States of America and the State of Illinois, American Bottom Conservancy, Health and Environmental Justice-St. Louis, Inc., Illinois Stewardship Alliance, and Prairie Rivers Network, v. Illinois Power Company and Dynegy Midwest Generation Inc.*, Civil Action No. 99-833-MJR, U.S. District Court, Southern District of Illinois, as initially entered by the Court on May 27, 2005)

Case 3:99-cv-00833-MJR-CJP Document 695 Filed 05/27/05 Page 1 of 87 Page ID #797

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF ILLINOIS

UNITED STATES OF AMERICA)	
)	
Plaintiff,)	
)	
and)	
)	
THE STATE OF ILLINOIS, AMERICAN)	
BOTTOM CONSERVANCY, HEALTH)	
AND ENVIRONMENTAL JUSTICE –)	
ST. LOUIS, INC., ILLINOIS)	
STEWARDSHIP ALLIANCE, and)	
PRAIRIE RIVERS NETWORK)	
)	
Plaintiff - Intervenors,)	
)	
v.)	Civil Action No. 99-833-MJR
)	
ILLINOIS POWER COMPANY and)	
DYNEGY MIDWEST GENERATION,)	
INC.,)	
)	
Defendants.)	
_____)	

CONSENT DECREE

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WHEREAS, the United States of America ("the United States"), on behalf of the United States Environmental Protection Agency ("EPA") filed a Complaint against Illinois Power Company ("Illinois Power") on November 3, 1999, and Amended Complaints against Illinois Power Company and Dynegy Midwest Generation, Inc. ("DMG") on January 19, 2000, March 14, 2001, and March 7, 2003, pursuant to Sections 113(b) and 167 of the Clean Air Act (the "Act"), 42 U.S.C. §§ 7413(b) and 7477, for injunctive relief and the assessment of civil penalties for alleged violations at the Baldwin Generating Station of:

- (a) the Prevention of Significant Deterioration provisions in Part C of Subchapter I of the Act, 42 U.S.C. §§ 7470-92;
- (b) the federally enforceable State Implementation Plan developed by the State of Illinois (the "Illinois SIP"); and
- (c) the New Source Performance Standard provisions in Part A of Subchapter I of the Act, 42 U.S.C. § 7411.

WHEREAS, EPA issued Notices of Violation with respect to such allegations to Illinois Power on November 3, 1999 and November 26, 2000;

WHEREAS, EPA provided Illinois Power, DMG, and the State of Illinois actual notice of violations pertaining to its alleged violations, in accordance with Section 113(a)(1) and (b) of the Act, 42 U.S.C. § 7413(a)(1) and (b);

WHEREAS, Illinois Power was the owner and operator of the Baldwin Facility from 1970 to October 1999. On October 1, 1999, Illinois Power transferred the Baldwin Facility to Illinova Corporation. Illinova Corporation then contributed the Baldwin Facility to Illinova

Power Marketing, Inc., after which time Illinois Power no longer owned or operated the Baldwin Facility.

WHEREAS, beginning on October 1, 1999 and continuing through the date of lodging of this Consent Decree, Illinois Power has been neither the owner nor the operator of the Baldwin Facility or of any of the Units in the DMG System which are affected by this Consent Decree;

WHEREAS, in February 2000, Illinova Corporation merged with Dynegy Holdings Inc. and became a wholly owned subsidiary of Dynegy Inc. (referred to herein as "Dynegy"). Thereafter, Illinova Power Marketing, Inc., the owner of the Baldwin Facility, changed its name to Dynegy Midwest Generation, Inc. (referred to herein as "DMG"). On September 30, 2004, Dynegy, through Illinova, sold Illinois Power to Ameren Corporation.

WHEREAS, Ameren and Illinova Corporation, a subsidiary of Dynegy, have entered into an agreement which provides for the escrow of certain funds, the release of which funds is related to the resolution of certain contingent environmental liabilities that were alleged in the above-referenced Amended Complaints against Illinois Power and DMG.

WHEREAS, Plaintiff-Intervenors – the American Bottom Conservancy, Health and Environmental Justice - St. Louis, Inc., Illinois Stewardship Alliance, the Prairie Rivers Network, and the State of Illinois – moved to intervene on September 25, 2003 and filed Complaints in Intervention. The Court granted intervention to all movants on October 23, 2003.

WHEREAS, in their Complaints, Plaintiff United States and Plaintiff Intervenors (collectively "Plaintiffs") allege, *inter alia*, that Illinois Power and DMG failed to obtain the necessary permits and install the controls necessary under the Act to reduce sulfur dioxide,

nitrogen oxides, and/or particulate matter emissions, and that such emissions can damage human health and the environment;

WHEREAS, the Plaintiffs' Complaints state claims upon which relief can be granted against Illinois Power and DMG under Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477, and 28 U.S.C. § 1355;

WHEREAS, DMG and Illinois Power have denied and continue to deny the violations alleged in the Complaints, maintain that they have been and remain in compliance with the Act and are not liable for civil penalties or injunctive relief, and DMG is agreeing to the obligations imposed by this Consent Decree solely to avoid further costs and uncertainty;

WHEREAS, DMG has installed equipment for the control of nitrogen oxides emissions at the Baldwin Facility, including Overfire Air systems on Baldwin Units 1, 2, and 3, Low NO_x Burners on Baldwin Unit 3 and Selective Catalytic Reduction ("SCR") Systems on Baldwin Units 1 and 2, resulting in a reduction in emissions of nitrogen oxides from the Baldwin Plant of approximately 65% below 1999 levels from 55,026 tons in 1999 to 19,061 tons in 2003;

WHEREAS, DMG switched from use of high sulfur coal to low sulfur Powder River Basin coal at Baldwin Units 1, 2 and 3 in 1999 and 2000, resulting in a reduction in emissions of sulfur dioxide from the Baldwin Plant of approximately 90% below 1999 levels from 245,243 tons in 1999 to 26,311 tons in 2003;

WHEREAS, the Parties anticipate that the installation and operation of pollution control equipment pursuant to this Consent Decree will achieve significant additional reductions of SO₂, NO_x, and PM emissions and thereby further improve air quality;

WHEREAS, in June of 2003, the liability stage of the litigation resulting from the United States' claims was tried to the Court and no decision has yet been rendered; and

WHEREAS, the Plaintiffs, DMG and Illinois Power have agreed, and the Court by entering this Consent Decree finds: that this Consent Decree has been negotiated in good faith and at arms length; that this settlement is fair, reasonable, in the best interest of the Parties and in the public interest, and consistent with the goals of the Act; and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this matter;

NOW, THEREFORE, without any admission by the Defendants, and without adjudication of the violations alleged in the Complaints or the NOV's, it is hereby ORDERED, ADJUDGED, AND DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over this action, the subject matter herein, and the Parties consenting hereto, pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367, Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477, and Section 42(e) of the Illinois Environmental Protection Act, 415 ILCS 5/42(e). Venue is proper under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and under 28 U.S.C. § 1391(b) and (c). Solely for the purposes of this Consent Decree and the underlying Complaints, and for no other purpose, Defendants waive all objections and defenses that they may have to the Court's jurisdiction over this action, to the Court's jurisdiction over the Defendants, and to venue in this District. Defendants shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree. Solely for purposes of the Complaints filed by the Plaintiffs in this matter and resolved by the Consent Decree, for purposes of entry and enforcement of this Consent Decree,

and for no other purpose, Defendants waive any defense or objection based on standing. Except as expressly provided for herein, this Consent Decree shall not create any rights in or obligations of any party other than the Plaintiffs and the Defendants. Except as provided in Section XXVI (Public Comment) of this Consent Decree, the Parties consent to entry of this Consent Decree without further notice.

II. APPLICABILITY

2. Upon entry, the provisions of the Consent Decree shall apply to and be binding upon and inure to the benefit of the Citizen Plaintiffs and DMG, and their respective successors and assigns, officers, employees and agents, solely in their capacities as such, and the State of Illinois and the United States. Illinois Power is a Party to this Consent Decree, is the beneficiary of Section X of this Consent Decree (Release and Covenant Not to Sue for Illinois Power Company), and is subject to Paragraph 171 and the other applicable provisions of the Consent Decree as specified in such Paragraph in the event it acquires an Ownership Interest in, or becomes an operator (as that term is used and interpreted under the Clean Air Act) of, any DMG System Unit, but otherwise has no other obligations under this Consent Decree except as expressly specified herein.

3. DMG shall be responsible for providing a copy of this Consent Decree to all vendors, suppliers, consultants, contractors, agents, and any other company or other organization retained to perform any of the work required by this Consent Decree. Notwithstanding any retention of contractors, subcontractors, or agents to perform any work required under this Consent Decree, DMG shall be responsible for ensuring that all work is performed in accordance with the requirements of this Consent Decree. In any action to enforce this Consent Decree,

DMG shall not assert as a defense the failure of its officers, directors, employees, servants, agents, or contractors to take actions necessary to comply with this Consent Decree, unless DMG establishes that such failure resulted from a Force Majeure Event, as defined in Paragraph 137 of this Consent Decree.

III. DEFINITIONS

4. A "30-Day Rolling Average Emission Rate" for a Unit shall be expressed as lb/mmBTU and calculated in accordance with the following procedure: first, sum the total pounds of the pollutant in question emitted from the Unit during an Operating Day and the previous twenty-nine (29) Operating Days; second, sum the total heat input to the Unit in mmBTU during the Operating Day and the previous twenty-nine (29) Operating Days; and third, divide the total number of pounds of the pollutant emitted during the thirty (30) Operating Days by the total heat input during the thirty (30) Operating Days. A new 30-Day Rolling Average Emission Rate shall be calculated for each new Operating Day. Each 30-Day Rolling Average Emission Rate shall include all emissions that occur during all periods of startup, shutdown and Malfunction within an Operating Day, except as follows:

- a. Emissions and BTU inputs that occur during a period of Malfunction shall be excluded from the calculation of the 30-Day Rolling Average Emission Rate if DMG provides notice of the Malfunction to EPA and the State in accordance with Paragraph 138 in Section XV (Force Majeure) of this Consent Decree;
- b. Emissions of NO_x and BTU inputs that occur during the fifth and subsequent Cold Start Up Period(s) that occur at a given Unit during any 30-day period shall be excluded from the calculation of the 30-Day Rolling Average Emission Rate if

inclusion of such emissions would result in a violation of any applicable 30-Day Rolling Average Emission Rate and DMG has installed, operated and maintained the SCR in question in accordance with manufacturers' specifications and good engineering practices. A "Cold Start Up Period" occurs whenever there has been no fire in the boiler of a Unit (no combustion of any Fossil Fuel) for a period of six (6) hours or more. The NO_x emissions to be excluded during the fifth and subsequent Cold Start Up Period(s) shall be the lesser of (i) those NO_x emissions emitted during the eight (8) hour period commencing when the Unit is synchronized with a utility electric transmission system and concluding eight (8) hours later, or (ii) those NO_x emissions emitted prior to the time that the flue gas has achieved the minimum SCR operational temperature specified by the catalyst manufacturer; and

- c. For a Unit that has ceased firing Fossil Fuel, emissions of SO₂ and Btu inputs that occur during any period, not to exceed two (2) hours, from the restart of the Unit to the time the Unit is fired with any coal, shall be excluded from the calculation of the 30-Day Rolling Average Emission Rate.

5. "Baghouse" means a fullstream (fabric filter) particulate emission control device.

6. "Boiler Island" means a Unit's (A) fuel combustion system (including bunker, coal pulverizers, crusher, stoker, and fuel burners); (B) combustion air system; (C) steam generating system (firebox, boiler tubes, and walls); and (D) draft system (excluding the stack), all as further described in "Interpretation of Reconstruction," by John B. Rasnic U.S. EPA (November 25, 1986) and attachments thereto.

7. "Capital Expenditure" means all capital expenditures, as defined by Generally Accepted Accounting Principles ("GAAP"), as those principles exist at the date of entry of this Consent Decree, excluding the cost of installing or upgrading pollution control devices.

8. "CEMS" or "Continuous Emission Monitoring System" means, for obligations involving NO_x and SO₂ under this Consent Decree, the devices defined in 40 C.F.R. § 72.2 and installed and maintained as required by 40 C.F.R. Part 75.

9. "Citizen Plaintiffs" means, collectively, the American Bottom Conservancy, Health and Environmental Justice - St. Louis, Inc., Illinois Stewardship Alliance, and the Prairie Rivers Network.

10. "Clean Air Act" or "Act" means the federal Clean Air Act, 42 U.S.C. §§ 7401-7671q, and its implementing regulations.

11. "Consent Decree" or "Decree" means this Consent Decree and the Appendix hereto, which is incorporated into this Consent Decree.

12. "Defendants" means Dynegy Midwest Generation, Inc. and Illinois Power Company.

13. "DMG" means Dynegy Midwest Generation, Inc.

14. "DMG System" means, solely for purposes of this Consent Decree, the following ten (10) listed coal-fired, electric steam generating Units (with the rated gross MW capacity of each Unit, reported to Mid-America Interconnected Network ("MAIN") in 2003, noted in parentheses), located at the following plants:

- Baldwin Generating Station in Baldwin, Illinois: Unit 1 (624 MW), 2 (629 MW), 3 (629 MW);

- Havana Generating Station in Havana, Illinois: Unit 6 (487 MW);
- Hennepin Generating Station in Hennepin, Illinois: Unit 1 (81 MW),
Unit 2 (240 MW);
- Vermilion Generating Station in Oakwood, Illinois: Unit 1 (84 MW),
Unit 2 (113 MW);
- Wood River Generating Station in Alton, Illinois: Unit 4 (105 MW),
Unit 5 (383 MW).

15. "Emission Rate" means the number of pounds of pollutant emitted per million BTU of heat input ("lb/mmBTU"), measured in accordance with this Consent Decree.

16. "EPA" means the United States Environmental Protection Agency.

17. "ESP" means electrostatic precipitator, a pollution control device for the reduction of PM.

18. "Existing Units" means those Units included in the DMG System.

19. "Flue Gas Desulfurization System," or "FGD," means a pollution control device with one or more absorber vessels that employs flue gas desulfurization technology for the reduction of sulfur dioxide.

20. "Fossil Fuel" means any hydrocarbon fuel, including coal, petroleum coke, petroleum oil, or natural gas.

21. "Illinois Environmental Protection Act" means the Illinois Environmental Protection Act, 415 ILCS 5/1 et. seq., and its implementing regulations.

22. "Illinois Power" means the Illinois Power Company.

23. "Improved Unit" means, in the case of NO_x, a DMG System Unit equipped with or scheduled under this Consent Decree to be equipped with an SCR, or, in the case of SO₂, a DMG System Unit scheduled under this Consent Decree to be equipped with an FGD (or equivalent SO₂ control technology approved pursuant to Paragraph 68). A Unit may be an Improved Unit for one pollutant without being an Improved Unit for the other. Any Other Unit can become an Improved Unit if (a) in the case of NO_x, it is equipped with an SCR (or equivalent NO_x control technology approved pursuant to Paragraph 64) and has become subject to a federally enforceable 0.100 lb/mmBTU NO_x 30-Day Rolling Average Emission Rate, or (b) in the case of SO₂, it is equipped with an FGD (or equivalent SO₂ control technology approved pursuant to Paragraph 68) and has become subject to a federally enforceable 0.100 lb/mmBTU SO₂ 30-Day Rolling Average Emission Rate, and (c) in the case of NO_x or SO₂, the requirement to achieve and maintain a 0.100 lb/mmBTU 30-Day Rolling Average Emission Rate is incorporated into the Title V Permit applicable to that Unit or, if no Title V Permit exists, a modification to this Consent Decree that is agreed to by the Plaintiffs and DMG and approved by this Court.

24. "lb/mmBTU" means one pound per million British thermal units.

25. "Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not Malfunctions.

26. "MW" means a megawatt or one million Watts.

27. “National Ambient Air Quality Standards” or “NAAQS” means national ambient air quality standards that are promulgated pursuant to Section 109 of the Act, 42 U.S.C. § 7409.

28. “Nonattainment NSR” means the nonattainment area New Source Review program within the meaning of Part D of Subchapter I of the Act, 42 U.S.C. §§ 7501-7515, 40 C.F.R. Part 51.

29. “NO_x” means oxides of nitrogen.

30. “NO_x Allowance” means an authorization or credit to emit a specified amount of NO_x that is allocated or issued under an emissions trading or marketable permit program of any kind that has been established under the Clean Air Act or a State Implementation Plan.

31. “Operating Day” means any calendar day on which a Unit fires Fossil Fuel; provided, however, that exclusively for purposes of Paragraph 36, “Operating Day” means any calendar day on which both Baldwin Unit 1 and Baldwin Unit 2 fire Fossil Fuel.

32. “Other Unit” means any Unit of the DMG System that is not an Improved Unit for the pollutant in question.

33. “Ownership Interest” means part or all of DMG’s legal or equitable ownership interest in any Unit in the DMG System.

34. “Parties” means the United States, the State of Illinois, the Citizen Plaintiffs, DMG, and Illinois Power.

35. “Plaintiffs” means the United States, the State of Illinois, and the Citizen Plaintiffs.

36. A “Plant-Wide 30-Day Rolling Average Emission Rate” shall be expressed as lb/mmBTU and calculated in accordance with the following procedure: first, sum the total

pounds of the pollutant in question emitted from all three Units at the Baldwin Plant during an Operating Day and the previous twenty-nine (29) Operating Days; second, sum the total heat input to all three Units at the Baldwin Plant in mmBTU during the Operating Day and the previous twenty-nine (29) Operating Days; and third, divide the total number of pounds of the pollutant emitted from all three Baldwin Units during the thirty (30) Operating Days by the total heat input to all three Baldwin Units during the thirty (30) Operating Days. A new Plant-Wide 30-Day Rolling Average Emission Rate shall be calculated for each new Operating Day. Each Plant-Wide 30-Day Rolling Average Emission Rate shall include all emissions that occur during all periods of startup, shutdown and Malfunction within an Operating Day. A Malfunction shall be excluded from this Emission Rate, however, if DMG satisfies the Force Majeure provisions of this Consent Decree.

37. A "Plant-Wide Annual Tonnage Emission Level" means, for the purposes of Section XI of this Decree, the number of tons of the pollutant in question that may be emitted from the plant at issue during the relevant calendar year (i.e., January 1 through December 31), and shall include all emissions of the pollutant emitted during periods of startup, shutdown, and Malfunction.

38. "Pollution Control Equipment Upgrade Analysis" means the technical study, analysis, review, and selection of control technology recommendations (including an emission rate or removal efficiency) required to be performed in connection with an application for a federal PSD permit, taking into account the characteristics of the existing facility. Except as otherwise provided in this Consent Decree, such study, analysis, review, and selection of recommendations shall be carried out in accordance with applicable federal and state regulations

and guidance describing the process and analysis for determining Best Available Control Technology (BACT), as that term is defined in 40 C.F.R. §52.21(b)(12), including, without limitation, the December 1, 1987 EPA Memorandum from J. Craig Potter, Assistant Administrator for Air and Radiation, regarding Improving New Source Review (NSR) Implementation. Nothing in this Decree shall be construed either to: (a) alter the force and effect of statements known as or characterized as "guidance" or (b) permit the process or result of a "Pollution Control Equipment Upgrade Analysis" to be considered BACT for any purpose under the Act.

39. "PM Control Device" means any device, including an ESP or a Baghouse, that reduces emissions of particulate matter (PM).

40. "PM" means particulate matter.

41. "PM CEMS" or "PM Continuous Emission Monitoring System" means the equipment that samples, analyzes, measures, and provides, by readings taken at frequent intervals, an electronic or paper record of PM emissions.

42. "PM Emission Rate" means the number of pounds of PM emitted per million BTU of heat input (lb/mmBTU), as measured in annual stack tests in accordance with EPA Method 5, 40 C.F.R. Part 60, including Appendix A.

43. "Project Dollars" means DMG's expenditures and payments incurred or made in carrying out the Environmental Mitigation Projects identified in Section VIII (Environmental Mitigation Projects) of this Consent Decree to the extent that such expenditures or payments both: (a) comply with the requirements set forth in Section VIII (Environmental Mitigation Projects) and Appendix A of this Consent Decree, and (b) constitute DMG's direct payments for

such projects, DMG's external costs for contractors, vendors, and equipment, or DMG's internal costs consisting of employee time, travel, or out-of-pocket expenses specifically attributable to these particular projects and documented in accordance with GAAP.

44. "PSD" means Prevention of Significant Deterioration within the meaning of Part C of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470 - 7492 and 40 C.F.R. Part 52.

45. "Selective Catalytic Reduction System" or "SCR" means a pollution control device that employs selective catalytic reduction technology for the reduction of NO_x emissions.

46. "SO₂" means sulfur dioxide.

47. "SO₂ Allowance" means "allowance" as defined at 42 U.S.C. § 7651a(3): "an authorization, allocated to an affected unit by the Administrator of EPA under Subchapter IV of the Act, to emit, during or after a specified calendar year, one ton of sulfur dioxide."

48. "System-Wide Annual Tonnage Limitation" means the limitation on the number of tons of the pollutant in question that may be emitted from the DMG System during the relevant calendar year (i.e., January 1 through December 31), and shall include all emissions of the pollutant emitted during periods of startup, shutdown, and Malfunction.

49. "Title V Permit" means the permit required of DMG's major sources under Subchapter V of the Act, 42 U.S.C. §§ 7661-7661e.

50. "Unit" means collectively, the coal pulverizer, stationary equipment that feeds coal to the boiler, the boiler that produces steam for the steam turbine, the steam turbine, the generator, the equipment necessary to operate the generator, steam turbine and boiler, and all ancillary equipment, including pollution control equipment. An electric steam generating station may comprise one or more Units.

IV. NO_x EMISSION REDUCTIONS AND CONTROLS

A. NO_x Emission Controls

51. Beginning 45 days after entry of this Consent Decree, and continuing thereafter, DMG shall commence operation of the SCRs installed at Baldwin Unit 1, Unit 2, and Havana Unit 6 so as to achieve and maintain a 30-Day Rolling Average Emission Rate from each such Unit of not greater than 0.100 lb/mmBTU NO_x.

52. Beginning 45 days after entry of this Consent Decree, and continuing thereafter, DMG shall achieve and maintain a Plant-Wide 30-Day Rolling Average Emission Rate of not greater than 0.100 lb/mmBTU NO_x at the Baldwin Plant.

53. Beginning 45 days after entry of this Consent Decree, and continuing thereafter, subject to paragraph 54 below, DMG shall achieve and maintain a 30-Day Rolling Average Emission Rate of not greater than 0.120 lb/mmBTU NO_x at Baldwin Unit 3.

54. Beginning on December 31, 2012, and continuing thereafter, DMG shall maintain a 30-Day Rolling Average Emission Rate of not greater than 0.100 lb/mmBTU NO_x at Baldwin Unit 3.

55. Beginning 30 days after entry of this Consent Decree, and continuing thereafter, DMG shall operate each SCR in the DMG System at all times when the Unit it serves is in operation, provided that such operation of the SCR is consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices for the SCR. During any such period in which the SCR is not operational, DMG will minimize emissions to the extent reasonably practicable.

56. Beginning 45 days from entry of this Consent Decree, DMG shall operate low NO_x burners (“LNB”) and/or Overfire Air Technology (“OFA”) on the DMG System Units listed in the table below at all times that the Units are in operation, consistent with the technological limitations, manufacturers’ specifications, and good engineering and maintenance practices for the LNB and/or the Overfire Air Technology, so as to minimize emissions to the extent reasonably practicable.

<u>DMG System Unit</u>	<u>NO_x Control Technology</u>
Baldwin Unit 1	OFA
Baldwin Unit 2	OFA
Baldwin Unit 3	LNB, OFA
Havana Unit 6	LNB, OFA
Hennepin Unit 1	LNB, OFA
Hennepin Unit 2	LNB, OFA
Vermilion Unit 2	LNB, OFA
Wood River Unit 4	LNB, OFA
Wood River Unit 5	LNB, OFA

B. System-Wide Annual Tonnage Limitations for NO_x

57. During each calendar year specified in the Table below, all Units in the DMG System, collectively, shall not emit NO_x in excess of the following System-Wide Annual Tonnage Limitations:

Applicable Calendar Year	System-Wide Annual Tonnage Limitations for NO _x
2005	15,000 tons
2006	14,000 tons
2007 and each year thereafter	13,800 tons

C. Use of NO_x Allowances

58. Except as provided in this Consent Decree, DMG shall not sell or trade any NO_x Allowances allocated to the DMG System that would otherwise be available for sale or trade as a result of the actions taken by DMG to comply with the requirements of this Consent Decree.

59. Except as may be necessary to comply with Section XIV (Stipulated Penalties), DMG may not use NO_x Allowances to comply with any requirement of this Consent Decree, including by claiming compliance with any emission limitation required by this Decree by using, tendering, or otherwise applying NO_x Allowances to offset any excess emissions (i.e., emissions above the limits specified in Paragraph 57).

60. NO_x Allowances allocated to the DMG System may be used by DMG only to meet its own federal and/or state Clean Air Act regulatory requirements, except as provided in Paragraph 61.

61. Provided that DMG is in compliance with the System-Wide Annual Tonnage Limitations for NO_x set forth in this Consent Decree, nothing in this Consent Decree shall preclude DMG from selling or transferring NO_x Allowances allocated to the DMG System that become available for sale or trade solely as a result of:

- a. activities that reduced NO_x emissions at any Unit within the DMG System prior to the date of entry of this Consent Decree;

- b. the installation and operation of any NO_x pollution control technology or technique that is not otherwise required by this Consent Decree; or
- c. achievement and maintenance of NO_x emission rates below a 30-Day Rolling Average Emission Rate of 0.100 lb/mmBTU at Baldwin Units 1, 2 or 3, or at Havana Unit 6,

so long as DMG timely reports the generation of such surplus NO_x Allowances in accordance with Section XII (Periodic Reporting) of this Consent Decree. DMG shall be allowed to sell or transfer NO_x Allowances equal to the NO_x emissions reductions achieved for any given year by any of the actions specified in Subparagraphs 61.b or 61.c. only to the extent that, and in the amount that, the total NO_x emissions from all Units within the DMG System are below the System-Wide Annual Tonnage Limitation specified in Paragraph 57 for that year.

62. Nothing in this Consent Decree shall prevent DMG from purchasing or otherwise obtaining NO_x Allowances from another source for purposes of complying with state or federal Clean Air Act requirements to the extent otherwise allowed by law.

D. NO_x Provisions - Improving Other Units

63. Any Other Unit can become an Improved Unit for NO_x if (a) it is equipped with an SCR (or equivalent NO_x control technology approved pursuant to Paragraph 64), and (b) has become subject to a federally enforceable 0.100 lb/mmBTU NO_x 30-Day Rolling Average Emission Rate.

64. With prior written notice to the Plaintiffs and written approval from EPA (after consultation with the State of Illinois and the Citizen Plaintiffs), an Other Unit in the DMG System may be considered an Improved Unit under this Consent Decree if DMG installs and

operates NO_x control technology, other than an SCR, that has been demonstrated to be capable of achieving and maintaining a 30-Day Rolling Average Emission Rate not greater than 0.100 lb/mmBTU NO_x and if such unit has become subject to a federally enforceable 0.100 lb/mmBTU NO_x 30-Day Rolling Average Emission Rate.

E. General NO_x Provisions

65. In determining Emission Rates for NO_x, DMG shall use CEMS in accordance with the reference methods specified in 40 C.F.R. Part 75.

V. SO₂ EMISSION REDUCTIONS AND CONTROLS

A. SO₂ Emission Limitations and Control Requirements

66. No later than the dates set forth in the Table below for each of the three Units at Baldwin and Havana Unit 6, and continuing thereafter, DMG shall not operate the specified Unit unless and until it has installed and commenced operation of, on a year-round basis, an FGD (or equivalent SO₂ control technology approved pursuant to Paragraph 68) on each such Unit, so as to achieve and maintain a 30-Day Rolling Average Emission Rate of not greater than 0.100 lb/mmBTU SO₂.

<u>UNIT</u>	<u>DATE</u>
First Baldwin Unit (i.e., any of the Baldwin Units 1, 2 or 3)	December 31, 2010
Second Baldwin Unit (i.e., either of the 2 remaining Baldwin Units)	December 31, 2011
Third Baldwin Unit (i.e., the remaining Baldwin Unit)	December 31, 2012
Havana Unit 6	December 31, 2012

67. Any FGD required to be installed under this Consent Decree may be a wet FGD or a dry FGD at DMG's option.

68. With prior written notice to the Plaintiffs and written approval from EPA (after consultation by EPA with the State of Illinois and the Citizen Plaintiffs), DMG may, in lieu of installing and operating an FGD at any of the Units specified in Paragraph 66, install and operate equivalent SO₂ control technology so long as such equivalent SO₂ control technology has been demonstrated to be capable of achieving and maintaining a 30-Day Rolling Average Emission Rate of not greater than 0.100 lb/mmBTU SO₂.

69. Beginning on the later of the date specified in Paragraph 66 or the first Operating Day of each Unit thereafter, and continuing thereafter, DMG shall operate each FGD (or equivalent SO₂ control technology approved pursuant to Paragraph 68) required by this Consent Decree at all times that the Unit it serves is in operation, provided that such operation of the FGD or equivalent technology is consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices for the FGD or equivalent technology. During any such period in which the FGD or equivalent technology is not operational, DMG will minimize emissions to the extent reasonably practicable.

70. No later than 30 Operating Days after entry of this Consent Decree, and continuing thereafter, DMG shall operate Heunepin Units 1 and 2 and Wood River Units 4 and 5 so as to achieve and maintain a 30-Day Rolling Average Emission Rate from each of the stacks serving such Units of not greater than 1.200 lb/mmBtu SO₂.

71. DMG shall operate Vermilion Units 1 and 2 so that no later than 30 Operating Days after January 1, 2007, DMG shall achieve and maintain a 30-Day Rolling Average Emission Rate from the stack serving such Units of not greater than 1.200 lb/mmBtu SO₂.

72. No later than 30 Operating Days after entry of this Consent Decree and continuing until December 31, 2012, DMG shall operate Havana Unit 6 so as to achieve and maintain a 30-Day Rolling Average Emission Rate from the stack serving such Unit of not greater than 1.200 lb/mmBtu SO₂.

B. System-Wide Annual Tonnage Limitations for SO₂

73. During each calendar year specified in the Table below, all Units in the DMG System, collectively, shall not emit SO₂ in excess of the following System-Wide Annual Tonnage Limitations:

Applicable Calendar Year	System-Wide Annual Tonnage Limitations for SO ₂
2005	66,300 tons
2006	66,300 tons
2007	65,000 tons
2008	62,000 tons
2009	62,000 tons
2010	62,000 tons
2011	57,000 tons
2012	49,500 tons
2013 and each year thereafter	29,000 tons

74. Except as may be necessary to comply with Section XIV (Stipulated Penalties), DMG may not use SO₂ Allowances to comply with any requirement of this Consent Decree,

including by claiming compliance with any emission limitation required by this Decree by using, tendering, or otherwise applying SO₂ Allowances to offset any excess emissions (i.e., emissions above the limits specified in Paragraph 73).

C. Surrender of SO₂ Allowances

75. For each year specified below, DMG shall surrender to EPA, or transfer to a non-profit third party selected by DMG for surrender, SO₂ Allowances that have been allocated to DMG for the specified calendar year by the Administrator of EPA under the Act or by any State under its State Implementation Plan, in the amounts specified below, subject to Paragraph 76:

<u>Calendar Year</u>	<u>Amount</u>
2008	12,000 Allowances
2009	18,000 Allowances
2010	24,000 Allowances
2011, and each year thereafter	30,000 Allowances

DMG shall make the surrender of SO₂ Allowances required by this Paragraph by December 31 of each specified calendar year.

76. If the surrender of SO₂ allowances required by Paragraph 75 would result in an insufficient number of allowances being available from those allocated to the Units comprising the DMG System to meet the requirements of any Federal and/or State requirements for any DMG System unit, DMG must provide notice to the Plaintiffs of such insufficiency, including documentation of the number of SO₂ allowances so required and the Federal and/or State requirement involved. Unless EPA objects, in writing, to the amounts surrendered or to be

surrendered, the basis of the amounts surrendered or to be surrendered, or the adequacy of the documentation, DMG may reduce the number of SO₂ allowances to be surrendered under Paragraph 75 to the extent necessary to allow such DMG System Unit to satisfy the specified Federal and/or State requirement(s). If DMG has sold or traded SO₂ allowances allocated by the Administrator of EPA or a State for the year in which the surrender of allowances under Paragraph 75 would result in an insufficient number of allowances, all sold or traded allowances must be restored to DMG's account through DMG's purchase or transfer of allowances before DMG may reduce the surrender requirements of Paragraph 75 as described above.

77. Nothing in this Consent Decree is intended to preclude DMG from using SO₂ Allowances allocated to the DMG System by the Administrator of EPA under the Act, or by any State under its State Implementation Plan, to meet its own Federal and/or State Clean Air Act regulatory requirements for any Unit in the DMG System.

78. For purposes of this Subsection, the "surrender of allowances" means permanently surrendering allowances from the accounts administered by EPA for all Units in the DMG System, so that such allowances can never be used thereafter to meet any compliance requirement under the Clean Air Act, the Illinois State Implementation Plan, or this Consent Decree.

79. If any allowances required to be surrendered under this Consent Decree are transferred directly to a non-profit third party, DMG shall include a description of such transfer in the next report submitted to EPA pursuant to Section XII (Periodic Reporting) of this Consent Decree. Such report shall: (i) identify the non-profit third-party recipient(s) of the SO₂ Allowances and list the serial numbers of the transferred SO₂ Allowances; and (ii) include a

certification by the third-party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the allowances and will not use any of the SO₂ Allowances to meet any obligation imposed by any environmental law. No later than the third periodic report due after the transfer of any SO₂ Allowances, DMG shall include a statement that the third-party recipient(s) surrendered the SO₂ Allowances for permanent surrender to EPA in accordance with the provisions of Paragraph 80 within one (1) year after DMG transferred the SO₂ Allowances to them. DMG shall not have complied with the SO₂ Allowance surrender requirements of this Paragraph until all third-party recipient(s) shall have actually surrendered the transferred SO₂ Allowances to EPA.

80. For all SO₂ Allowances surrendered to EPA, DMG or the third-party recipient(s) (as the case may be) shall first submit an SO₂ Allowance transfer request form to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of such SO₂ Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, DMG or the third-party recipient(s) shall irrevocably authorize the transfer of these SO₂ Allowances and identify – by name of account and any applicable serial or other identification numbers or station names – the source and location of the SO₂ Allowances being surrendered.

81. The requirements in Paragraphs 75 and 76 of this Decree pertaining to DMG's surrender of SO₂ Allowances are permanent injunctions not subject to any termination provision of this Decree.

E. General SO₂ Provisions

82. In determining Emission Rates for SO₂, DMG shall use CEMS in accordance with those reference methods specified in 40 C.F.R. Part 75.

VI. PM EMISSION REDUCTIONS AND CONTROLS

A. Optimization of PM Emission Controls

83. Beginning ninety (90) days after entry of this Consent Decree, and continuing thereafter, DMG shall operate each PM Control Device on each Unit within the DMG System to maximize PM emission reductions at all times when the Unit is in operation, provided that such operation of the PM Control Device is consistent with the technological limitations, manufacturer's specifications and good engineering and maintenance practices for the PM Control Device. During any periods when any section or compartment of the PM control device is not operational, DMG will minimize emissions to the extent reasonably practicable. Specifically, DMG shall, at a minimum, to the extent reasonably practicable: (a) energize each section of the ESP for each unit, where applicable, operate each compartment of the Baghouse for each unit, where applicable (regardless of whether those actions are needed to comply with opacity limits), and repair any failed ESP section or Baghouse compartment at the next planned Unit outage (or unplanned outage of sufficient length); (b) operate automatic control systems on each ESP to maximize PM collection efficiency, where applicable; (c) maintain and replace bags on each Baghouse as needed to maximize collection efficiency, where applicable; and (d) inspect for and repair during the next planned Unit outage (or unplanned outage of sufficient length) any openings in ESP casings, ductwork and expansion joints to minimize air leakage.

84. Within two hundred seventy (270) days after entry of this Consent Decree, for each DMG System Unit served by an ESP or Baghouse, DMG shall complete a PM emission control optimization study which shall recommend: the best available maintenance, repair, and operating practices and a schedule for implementation of such to optimize ESP or Baghouse availability and performance in accordance with manufacturers' specifications, the operational design of the Unit, and good engineering practices. DMG shall retain a qualified contractor to assist in the performance and completion of each study and shall implement the study's recommendations in accordance with the schedule provided for in the study, but in no event later than the next planned Unit outage or 180 days of completion of the optimization study, whichever is later. Thereafter, DMG shall maintain each ESP and Baghouse as required by the study's recommendations or other alternative actions as approved by EPA. These requirements of this Paragraph shall also apply, and these activities shall be repeated, whenever DMG makes a major change to a Unit's ESP, installs a new PM Control Device, or changes the fuel used by a Unit.

B. Installation of New PM Emission Controls

85. No later than the dates set forth in the Table below for Baldwin Units 1, 2 and 3 and Havana Unit 6, and continuing thereafter, DMG shall not operate the specified Unit unless and until it has installed and commenced operation of a Baghouse on each such Unit so as to achieve and maintain a PM emissions rate of not greater than 0.015 lb/mmBTU.

Unit	Date
First Baldwin Unit (i.e., any of Baldwin Units 1, 2 or 3)	December 31, 2010
Second Baldwin Unit (i.e., either of the 2 remaining Baldwin Units)	December 31, 2011
Third Baldwin Unit (i.e., the remaining Baldwin Unit)	December 31, 2012
Havana Unit 6	December 31, 2012

C. Upgrade of Existing PM Emission Controls

86. At each Unit listed below, no later than the dates specified, and continuing thereafter, DMG shall operate ESPs or alternative PM control equipment at the following Units to achieve and maintain a PM emissions rate of not greater than 0.030 lb/mmBTU:

Unit	Date
Havana Unit 6	December 31, 2005
1 st Wood River Unit (i.e., either of Wood River Units 4 or 5)	December 31, 2005
1 st Hennepin Unit (i.e., either of Hennepin Units 1 or 2)	December 31, 2006
2 nd Wood River Unit (i.e., the remaining Wood River Unit)	December 31, 2007
2 nd Hennepin Unit (i.e., the remaining Hennepin Unit)	December 31, 2010
1 st Vermilion Unit (i.e., either of Vermilion Units 1 or 2)	December 31, 2010
2 nd Vermilion Unit (i.e., the remaining Vermilion Unit)	December 31, 2010

In the alternative and in lieu of demonstrating compliance with the PM emission rate applicable under this Paragraph, DMG may elect to undertake an upgrade of the existing PM emissions control equipment for any such Unit based on a Pollution Control Equipment Upgrade Analysis for that Unit. The preparation, submission, and implementation of such Pollution Control Equipment Upgrade Analysis shall be undertaken and completed in accordance with the compliance schedules and procedures as specified in Paragraph 88.

87. DMG shall operate each ESP (on Units without a Baghouse) and each Baghouse in the DMG System at all times when the Unit it serves is in operation, provided that such operation of the ESP or Baghouse is consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices for the ESP or Baghouse. During any such period in which the ESP or Baghouse is not operational, DMG will minimize emissions to the extent reasonably practicable. Notwithstanding the foregoing sentence, DMG shall not be required to operate an ESP on any Unit on which a Baghouse is installed and operating, unless DMG operated the ESP during the immediately preceding stack test required by Paragraph 89.

88. For each Unit in the DMG System for which DMG does not elect to meet a PM Emission Rate of 0.030 lb/mmBTU as required by Paragraph 86, DMG shall prepare, submit, and implement a Pollution Control Equipment Upgrade Analysis in accordance with this Paragraph. Such Pollution Control Equipment Upgrade Analysis shall include proposed upgrades to the Unit's existing PM Control Devices and a proposed alternate PM Emission Rate that the Unit shall meet upon completion of such upgrade. DMG shall deliver such Pollution Control Equipment Upgrade Analysis to EPA and the State of Illinois for approval pursuant to

Section XIII (Review and Approval of Submittals) of this Consent Decree at least 24 months prior to the deadlines set forth in Paragraph 86 for each such Unit, unless those deadlines are less than 24 months after the date of entry of this Decree. In those cases only, (a) the Analysis shall be delivered within 180 days of entry of this Decree, and (b) so long as DMG timely submits the Analysis, any deadline for implementing a PM Emission Control Equipment Upgrade may be extended in accordance with the provisions of subparagraph (c) below.

- a. In conducting the Pollution Control Equipment Upgrade Analysis for any Unit, DMG shall consider all commercially available control technologies, except that DMG need not consider any of the following PM control measures:
 1. the complete replacement of the existing ESP with a new ESP, FGD, or Baghouse, or
 2. the upgrade of the existing ESP controls through the installation of any supplemental PM pollution control device if the costs of such upgrade are equal to or greater than the costs of a replacement ESP, FGD, or Baghouse (on a total dollar-per-ton-of-pollutant-removed basis).
- b. With each Pollution Control Equipment Upgrade Analysis delivered to EPA and the State of Illinois, DMG shall simultaneously deliver all documents that were considered in preparing such Pollution Control Equipment Upgrade Analysis. DMG shall retain a qualified contractor to assist in the performance and completion of each Pollution Control Equipment Upgrade Analysis.
- c. Beginning one (1) year after EPA and the State of Illinois approve the recommendation(s) made in a Pollution Control Equipment Upgrade Analysis for

a Unit, DMG shall not operate that Unit unless all equipment called for in the recommendation(s) of the Pollution Control Equipment Upgrade Analysis has been installed. An installation period longer than one year may be allowed if DMG makes such a request in the Pollution Control Equipment Upgrade Analysis and EPA and the State of Illinois determine such additional time is necessary due to factors including but not limited to the magnitude of the PM control project or the need to address reliability concerns that could result from multiple Unit outages within the DMG System. Upon installation of all equipment recommended under an approved Pollution Control Equipment Upgrade Analysis, DMG shall operate such equipment in compliance with the recommendation(s) of the approved Pollution Control Equipment Upgrade Analysis, including compliance with the PM Emission Rate specified by the recommendation(s).

D. PM Emissions Monitoring

1. PM Stack Tests.

89. Beginning in calendar year 2005, and continuing in each calendar year thereafter, DMG shall conduct a PM performance test on each DMG System Unit. The annual stack test requirement imposed on each DMG System Unit by this Paragraph may be satisfied by stack tests conducted by DMG as required by its permits from the State of Illinois for any year that such stack tests are required under the permits. DMG may perform testing every other year, rather than every year, provided that two of the most recently completed test results from tests conducted in accordance with the methods and procedures specified in Paragraph 90 demonstrate that the particulate matter emissions are equal to or less than 0.015 lb/mmBTU. DMG shall

perform testing every year, rather than every other year, beginning in the year immediately following any test result demonstrating that the particulate matter emissions are greater than 0.015 lb/mmBTU.

90. The reference methods and procedures for determining compliance with PM Emission Rates shall be those specified in 40 C.F.R. Part 60, Appendix A, Method 5, or an alternative method that is promulgated by EPA, requested for use herein by DMG, and approved for use herein by EPA and the State of Illinois. Use of any particular method shall conform to the EPA requirements specified in 40 C.F.R. Part 60, Appendix A and 40 C.F.R. § 60.48a (b) and (e), or any federally approved method contained in the Illinois State Implementation Plan. DMG shall calculate the PM Emission Rates from the stack test results in accordance with 40 C.F.R. § 60.8(f). The results of each PM stack test shall be submitted to EPA and the State of Illinois within 45 days of completion of each test.

2. PM CEMS

91. DMG shall install and operate PM CEMS in accordance with Paragraphs 92 through 96. Each PM CEMS shall comprise a continuous particle mass monitor measuring particulate matter concentration, directly or indirectly, on an hourly average basis and a diluent monitor used to convert the concentration to units of lb/mmBTU. DMG shall maintain, in an electronic database, the hourly average emission values produced by all PM CEMS in lb/mmBTU. DMG shall use reasonable efforts to keep each PM CEMS running and producing data whenever any Unit served by the PM CEMS is operating.

92. Within nine (9) months after entry of this Consent Decree, but in any case no later than June 30, 2006, DMG shall submit to EPA and the State of Illinois for review and

approval pursuant to Section XIII (Review and Approval of Submittals) of this Consent Decree (a) a plan for the installation and certification of each PM CEMS; and (b) a proposed Quality Assurance/Quality Control ("QA/QC") protocol that shall be followed in calibrating such PM CEMS. In developing both the plan for installation and certification of the PM CEMS and the QA/QC protocol, DMG shall use the criteria set forth in EPA's Amendments to Standards of Performance for New Stationary Sources: Monitoring Requirements, 69 Fed. Reg. 1786 (January 12, 2004) ("P.S. 11"). EPA and the State of Illinois shall expeditiously review such submissions. Following approval by EPA and the State of Illinois of the protocol, DMG shall thereafter operate each PM CEMS in accordance with the approved protocol.

93. No later than the dates specified below, DMG shall install, certify, and operate PM CEMS on four (4) Units, stacks or common stacks in accordance with the following schedule:

STACK	DATE TO COMMENCE OPERATION OF PM CEMS
1 st CEM on any DMG System Unit not scheduled to receive an FGD	December 31, 2006
2 nd CEM on any DMG System Unit not scheduled to receive an FGD	December 31, 2007
3 rd CEM on any DMG System Unit scheduled to receive an FGD	December 31, 2011
4 th CEM on any DMG System Unit scheduled to receive an FGD	December 31, 2012

94. No later than ninety (90) days after DMG begins operation of the PM CEMS, DMG shall conduct tests of each PM CEMS to demonstrate compliance with the PM CEMS installation and certification plan submitted to and approved by EPA and the State of Illinois in accordance with Paragraph 92.

95. DMG shall operate the PM CEMS for at least two (2) years on each of the Units specified in Paragraph 93. After two (2) years of operation, DMG shall not be required to continue operating the PM CEMS on any such Units if EPA determines that operation of the PM CEMS is no longer feasible. Operation of a PM CEMS shall be considered no longer feasible if (a) the PM CEMS cannot be kept in proper condition for sufficient periods of time to produce reliable, adequate, or useful data consistent with the QA/QC protocol; or (b) DMG demonstrates that recurring, chronic, or unusual equipment adjustment or servicing needs in relation to other types of continuous emission monitors cannot be resolved through reasonable expenditures of resources. If EPA determines that DMG has demonstrated pursuant to this Paragraph that operation is no longer feasible, DMG shall be entitled to discontinue operation of and remove the PM CEMS.

3. PM Reporting

96. Following the installation of each PM CEMS, DMG shall begin and continue to report to EPA, the State of Illinois, and the Citizen Plaintiffs, pursuant to Section XII (Periodic Reporting), the data recorded by the PM CEMS, expressed in lb/mmBTU on a 3-hour rolling average basis in electronic format, as required by Paragraph 91.

E. General PM Provisions

97. Nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law (including any defenses, entitlements, challenges, or clarifications related to the Credible Evidence Rule, 62 Fed. Reg. 8315 (Feb. 27, 1997)) concerning the use of data for any purpose under the Act.

VII. PROHIBITION ON NETTING CREDITS OR
OFFSETS FROM REQUIRED CONTROLS

98. Emission reductions that result from actions to be taken by DMG after entry of this Consent Decree to comply with the requirements of this Consent Decree shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining a netting credit under the Clean Air Act's Nonattainment NSR and PSD programs.

99. The limitations on the generation and use of netting credits or offsets set forth in the previous Paragraph 98 do not apply to emission reductions achieved by DMG System Units that are greater than those required under this Consent Decree. For purposes of this Paragraph, emission reductions from a DMG System Unit are greater than those required under this Consent Decree if, for example, they result from DMG compliance with federally enforceable emission limits that are more stringent than those limits imposed on DMG System Units under this Consent Decree and under applicable provisions of the Clean Air Act or the Illinois State Implementation Plan.

100. Nothing in this Consent Decree is intended to preclude the emission reductions generated under this Consent Decree from being considered by the State of Illinois or EPA as creditable contemporaneous emission decreases for the purpose of attainment demonstrations

submitted pursuant to § 110 of the Act, 42 U.S.C. § 7410, or in determining impacts on NAAQS, PSD increment, or air quality related values, including visibility, in a Class I area.

VIII. ENVIRONMENTAL MITIGATION PROJECTS

101. DMG shall implement the Environmental Mitigation Projects ("Projects") described in Appendix A to this Decree in compliance with the approved plans and schedules for such Projects and other terms of this Consent Decree. DMG shall submit plans for the Projects to the Plaintiffs for review and approval pursuant to Section XIII (Review and Approval of Submittals) of this Consent Decree in accordance with the schedules set forth in Appendix A. In implementing the Projects, DMG shall spend no less than \$15 million in Project Dollars on or before December 31, 2007. DMG shall maintain, and present to the Plaintiffs upon request, all documents to substantiate the Project Dollars expended and shall provide these documents to the Plaintiffs within thirty (30) days of a request by any of the Plaintiffs for the documents.

102. All plans and reports prepared by DMG pursuant to the requirements of this Section of the Consent Decree and required to be submitted to EPA shall be publicly available from DMG without charge.

103. DMG shall certify, as part of each plan submitted to the Plaintiffs for any Project, that DMG is not otherwise required by law to perform the Project described in the plan, that DMG is unaware of any other person who is required by law to perform the Project, and that DMG will not use any Project, or portion thereof, to satisfy any obligations that it may have under other applicable requirements of law, including any applicable renewable portfolio standards.

104. DMG shall use good faith efforts to secure as much benefit as possible for the Project Dollars expended, consistent with the applicable requirements and limits of this Consent Decree.

105. If DMG elects (where such an election is allowed) to undertake a Project by contributing funds to another person or entity that will carry out the Project in lieu of DMG, but not including DMG's agents or contractors, that person or instrumentality must, in writing: (a) identify its legal authority for accepting such funding; and (b) identify its legal authority to conduct the Project for which DMG contributes the funds. Regardless of whether DMG elected (where such election is allowed) to undertake a Project by itself or to do so by contributing funds to another person or instrumentality that will carry out the Project, DMG acknowledges that it will receive credit for the expenditure of such funds as Project Dollars only if DMG demonstrates that the funds have been actually spent by either DMG or by the person or instrumentality receiving them (or, in the case of internal costs, have actually been incurred by DMG), and that such expenditures met all requirements of this Consent Decree.

106. Beginning six (6) months after entry of this Consent Decree, and continuing until completion of each Project (including any applicable periods of demonstration or testing), DMG shall provide the Plaintiffs with semi-annual updates concerning the progress of each Project.

107. Within sixty (60) days following the completion of each Project required under this Consent Decree (including any applicable periods of demonstration or testing), DMG shall submit to the Plaintiffs a report that documents the date that the Project was completed, DMG's results of implementing the Project, including the emission reductions or other environmental benefits achieved, and the Project Dollars expended by DMG in implementing the Project.

IX. CIVIL PENALTY

108. Within thirty (30) calendar days after entry of this Consent Decree, DMG shall pay to the United States a civil penalty in the amount of \$9,000,000. The civil penalty shall be paid by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing USAO File Number 1999V00379 and DOJ Case Number 90-5-2-1-06837 and the civil action case name and case number of this action. The costs of such EFT shall be DMG's responsibility. Payment shall be made in accordance with instructions provided to DMG by the Financial Litigation Unit of the U.S. Attorney's Office for the Southern District of Illinois. Any funds received after 2:00 p.m. EDT shall be credited on the next business day. At the time of payment, DMG shall provide notice of payment, referencing the USAO File Number, the DOJ Case Number, and the civil action case name and case number, to the Department of Justice and to EPA in accordance with Section XIX (Notices) of this Consent Decree.

109. Failure to timely pay the civil penalty shall subject DMG to interest accruing from the date payment is due until the date payment is made at the rate prescribed by 28 U.S.C. § 1961, and shall render DMG liable for all charges, costs, fees, and penalties established by law for the benefit of a creditor or of the United States in securing payment.

110. Payments made pursuant to this Section are penalties within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. § 162(f), and are not tax-deductible expenditures for purposes of federal law.

X. RELEASE AND COVENANT NOT TO SUE
FOR ILLINOIS POWER COMPANY

111. Upon entry of this Decree, each of the Plaintiffs hereby forever releases Illinois Power Company from, and covenants not to sue Illinois Power Company for, any and all civil claims, causes of action, and liability under the Clean Air Act and/or the Illinois Environmental Protection Act that such Plaintiffs could assert (whether such claims, causes of action, and liability are, were, or ever will be characterized as known or unknown, asserted or unasserted, liquidated or contingent, accrued or unaccrued), where such claims, causes of action, and liability are based on any modification, within the meaning of the Clean Air Act and/or the Illinois Environmental Protection Act, undertaken at any time before lodging of this Decree at any DMG System Unit, including and without limitation all such claims, causes of action, and liability asserted, or that could have been asserted, against Illinois Power Company by the United States, the State of Illinois and/or the Citizen Plaintiffs in the lawsuit styled United States of America, et al. v. Illinois Power Company and Dynegy Midwest Generation, Inc., Civil Action No. 99-833-MJR and all such civil claims, causes of action, and liability asserted or that could have been or could be asserted under any or all of the following statutory and/or regulatory provisions:

- a. Parts C or D of Subchapter I of the Clean Air Act,
- b. Section 111 of the Clean Air Act and 40 C.F.R. Section 60.14,
- c. The federally approved and enforceable Illinois State Implementation Plan, but only insofar as such claims were alleged in the third amended complaint filed in the lawsuit so styled,

- d. Sections 502(a) and 504(a) of the Clean Air Act, but only to the extent that such claims are based on Illinois Power's failure to obtain an operating permit that reflects applicable requirements imposed under Parts C or D of Subchapter I, or Section 111, of the Clean Air Act,
- e. Sections 9 and 9.1 of the Illinois Environmental Protection Act, 415 ILCS 5/9 and 9.1, all applicable regulations promulgated thereunder, and all relevant prior versions of such statute and regulations, and
- f. Section 39.5 of the Illinois Environmental Protection Act, 415 ILCS 5/39.5, and all applicable regulations promulgated thereunder, and all relevant prior versions of such statutes and regulations, but only to the extent that such claims are based on Illinois Power's failure to obtain an operating permit that reflects applicable requirements imposed under Sections 9 and 9.1 of the Illinois Environmental Protection Act, 415 ILCS 5/9 and 9.1,

where such claims, causes of actions and liability are based on any modification, within the meaning of the Clean Air Act and/or the Illinois Environmental Protection Act, undertaken at any time before lodging of this Decree at any DMG System Unit. As to Illinois Power Company, such resolved claims shall not be subject to the Bases for Pursuing Resolved Claims set forth in Section XI, Subsection B, of this Consent Decree.

112. In accordance with Paragraph 171 of this Decree, in the event that Illinois Power acquires an Ownership Interest in, or becomes an operator (as that term is used and interpreted under the Clean Air Act) of, any DMG System Unit, this release shall become void with respect

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to the Unit(s) to which the Ownership Interest applies when and to the extent specified in Paragraph 171.

XI. RESOLUTION OF PLAINTIFFS' CIVIL CLAIMS AGAINST DMG

A. RESOLUTION OF PLAINTIFFS' CIVIL CLAIMS

113. Claims Based on Modifications Occurring Before the Lodging of Decree.

Entry of this Decree shall resolve all civil claims of the Plaintiffs against DMG under any or all of:

- a. Parts C or D of Subchapter I of the Clean Air Act,
- b. Section 111 of the Clean Air Act and 40 C.F.R. Section 60.14,
- c. The federally approved and enforceable Illinois State Implementation Plan, but only insofar as such claims were alleged in the third amended complaint filed in the lawsuit styled United States of America, et al. v. Illinois Power Company and Dynegy Midwest Generation, Inc., Civil Action No. 99-833-MJR,
- d. Sections 502(a) and 504(a) of the Clean Air Act, but only to the extent that such claims are based on DMG's or Illinois Power's failure to obtain an operating permit that reflects applicable requirements imposed under Parts C or D of Subchapter I, or Section 111, of the Clean Air Act,
- e. Sections 9 and 9.1 of the Illinois Environmental Protection Act, 415 ILCS 5/9 and 9.1, all applicable regulations promulgated thereunder, and all relevant prior versions of such statute and regulations, and
- f. Section 39.5 of the Illinois Environmental Protection Act, 415 ILCS 5/39.5, and all applicable regulations promulgated thereunder, and all relevant prior versions

of such statutes and regulations, but only to the extent that such claims are based on Illinois Power's failure to obtain an operating permit that reflects applicable requirements imposed under Sections 9 and 9.1 of the Illinois Environmental Protection Act, 415 ILCS 5/9 and 9.1, that arose from any modifications commenced at any DMG System Unit prior to the date of lodging of this Decree, including but not limited to those modifications alleged in the Complaints filed in this civil action.

114. Claims Based on Modifications After the Lodging of Decree.

As to DMG, entry of this Decree also shall resolve all civil claims of the Plaintiffs against DMG for pollutants regulated under Parts C or D of Subchapter I of the Clean Air Act, and under regulations promulgated thereunder as of the date of lodging of this Decree, where such claims are based on a modification completed before December 31, 2015 and:

- a. commenced at any DMG System unit after lodging of this Decree; or
- b. that this Consent Decree expressly directs DMG to undertake.

The term "modification" as used in this Paragraph 114 shall have the meaning that term is given under the Clean Air Act and under the regulations promulgated thereunder as of July 31, 2003.

115. Reopeners. The Resolution of the Plaintiffs' Civil Claims against DMG, as provided by this Subsection A, is subject to the provisions of Subsection B of this Section.

B. PURSUIT OF PLAINTIFFS' CIVIL CLAIMS OTHERWISE RESOLVED

116. Bases for Pursuing Resolved Claims Across DMG System. If DMG violates System-Wide Annual Tonnage Limitations for NO_x required pursuant to Paragraph 57, the System-Wide Annual Tonnage Limitations for SO₂ required pursuant to Paragraph 73, or

operates a Unit more than ninety days past an installation date without completing the required installation or upgrade and commencing operation of any emission control device required pursuant to Paragraphs 51, 54, 66, or 85, then the Plaintiffs may pursue any claim at any DMG System Unit that is otherwise resolved under Subsection A (Resolution of Plaintiffs' Civil Claims), subject to (a) and (b) below.

- a. For any claims based on modifications undertaken at an Other Unit (i.e., any Unit of the DMG System that is not an Improved Unit for the pollutant in question), claims may be pursued only where the modification(s) on which such claim is based was commenced within the five (5) years preceding the violation or failure specified in this Paragraph.
- b. For any claims based on modifications undertaken at an Improved Unit, claims may be pursued only where the modification(s) on which such claim is based was commenced (1) after lodging of the Consent Decree and (2) within the five years preceding the violation or failure specified in this Paragraph.

117. Additional Bases for Pursuing Resolved Claims for Modifications at an Improved Unit. Solely with respect to Improved Units, the Plaintiffs may also pursue claims arising from a modification (or collection of modifications) at an Improved Unit that have otherwise been resolved under Subsection A (Resolution of Plaintiffs' Civil Claims), if the modification (or collection of modifications) at the Improved Unit on which such claims are based (a) was commenced after lodging of this Consent Decree, and (b) individually (or collectively) increased the maximum hourly emission rate of that Unit for NO_x or SO₂ (as measured by 40 C.F.R. § 60.14 (b) and (h)) by more than ten percent (10%).

118. Additional Bases for Pursuing Resolved Claims for Modifications at an Other

- Unit. a. Solely with respect to Other Units, the Plaintiffs may also pursue claims arising from a modification (or collection of modifications) at an Other Unit that have otherwise been resolved under Subsection A (Resolution of Plaintiffs' Civil Claims), if the modification (or collection of modifications) at the Other Unit on which the claim is based was commenced within the five (5) years preceding any of the following events:
1. a modification (or collection of modifications) at such Other Unit commenced after lodging of this Consent Decree increases the maximum hourly emission rate for such Other Unit for the relevant pollutant (NO_x or SO_2) (as measured by 40 C.F.R. § 60.14(b) and (h));
 2. the aggregate of all Capital Expenditures made at such Other Unit (a) exceed \$150/KW on the Unit's Boiler Island (based on the generating capacities identified in Paragraph 14) during the period from the date of lodging of this Decree through December 31, 2010, provided that Capital Expenditures made solely for the conversion of Vermilion Units 1 and 2 to low sulfur coal through the earlier of entry of this Consent Decree or September 30, 2005, shall be excluded; or (b) exceed \$125/KW on the Unit's Boiler Island (based on the generating capacities identified in Paragraph 14) during the period from January 1, 2011 through December 31, 2015. (Capital Expenditures shall be measured in calendar year 2004

constant dollars, as adjusted by the McGraw-Hill Engineering News-Record Construction Cost Index); or

3. a modification (or collection of modifications) at such Other Unit commenced after lodging of this Consent Decree results in an emissions increase of NO_x and/or SO₂ at such Other Unit, and such increase:

- (i) presents, by itself, or in combination with other emissions or sources, "an imminent and substantial endangerment" within the meaning of Section 303 of the Act, 42 U.S.C. §7603;
- (ii) causes or contributes to violation of a NAAQS in any Air Quality Control Area that is in attainment with that NAAQS;
- (iii) causes or contributes to violation of a PSD increment; or
- (iv) causes or contributes to any adverse impact on any formally-recognized air quality and related values in any Class I area.

4. The introduction of any new or changed NAAQS shall not, standing alone, provide the showing needed under Paragraph 113, Subparagraphs (3)(ii) or (3)(iii), to pursue any claim for a modification at an Other Unit resolved under Subsection B of this Section.

- b. Solely with respect to Other Units at the plants listed below, the Plaintiffs may also pursue claims arising from a modification (or collection of modifications) at such Other Unit commenced after lodging of this Consent Decree if such modification (or collection of modifications) results in an emissions increase of

NO_x and/or SO₂ at such Other Unit, and such increase causes the emissions at the Plant at issue to exceed the Plant-Wide Annual Tonnage Emission Levels listed below:

<u>Unit</u>	<u>SO₂ Tons Limit</u>	<u>NO_x Tons Limit</u>
Hennepin	9,050	2,650
Vermillion	17,370 (in 2005) 5,650 (in 2006 and thereafter)	3,360
Wood River	13,700	3,100

XII. PERIODIC REPORTING

119. Within one hundred eighty (180) days after each date established by this Consent Decree for DMG to achieve and maintain a certain PM Emission Rate at any DMG System Unit, DMG shall conduct a performance test for PM that demonstrates compliance with the Emission Rate required by this Consent Decree. Within forty-five (45) days of each such performance test, DMG shall submit the results of the performance test to EPA, the State of Illinois, and the Citizen Plaintiffs at the addresses specified in Section XIX (Notices) of this Consent Decree.

120. Beginning thirty (30) days after the end of the second full calendar quarter following the entry of this Consent Decree, and continuing on a semi-annual basis until December 31, 2015, and in addition to any other express reporting requirement in this Consent Decree, DMG shall submit to EPA, the State of Illinois, and the Citizen Plaintiffs a progress report.

121. The progress report shall contain the following information:

- a. all information necessary to determine compliance with the requirements of the following Paragraphs of this Consent Decree: Paragraphs 51, 52, 53, 54, and 57 concerning NO_x emissions; Paragraphs 66, 70, 71, 72 and 73 concerning SO₂ emissions; Paragraphs 83, 84, 85, 86, 88 (if applicable), 89, 91, 93, and 94 concerning PM emissions;
- b. documentation of any Capital Expenditures made, during the period covered by the progress report, solely for the conversion of Vermilion Units 1 and 2 to low sulfur coal, but excluded from the aggregate of Capital Expenditures pursuant to Paragraph 118(a)(2);
- c. all information relating to emission allowances and credits that DMG claims to have generated in accordance with Paragraph 61 through compliance beyond the requirements of this Consent Decree; and
- d. all information indicating that the installation and commencement of operation for a pollution control device may be delayed, including the nature and cause of the delay, and any steps taken by DMG to mitigate such delay.

122. In any periodic progress report submitted pursuant to this Section, DMG may incorporate by reference information previously submitted under its Title V permitting requirements, provided that DMG attaches the Title V permit report, or the relevant portion thereof, and provides a specific reference to the provisions of the Title V permit report that are responsive to the information required in the periodic progress report.

123. In addition to the progress reports required pursuant to this Section, DMG shall provide a written report to EPA, the State of Illinois, and the Citizen Plaintiffs of any violation of

the requirements of this Consent Decree within fifteen (15) calendar days of when DMG knew or should have known of any such violation. In this report, DMG shall explain the cause or causes of the violation and all measures taken or to be taken by DMG to prevent such violations in the future.

124. Each DMG report shall be signed by DMG's Vice President of Environmental Services or his or her equivalent or designee of at least the rank of Vice President, and shall contain the following certification:

This information was prepared either by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my evaluation, or the direction and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, I hereby certify under penalty of law that, to the best of my knowledge and belief, this information is true, accurate, and complete. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.

125. If any SO₂ Allowances are surrendered to any third party pursuant to this Consent Decree, the third party's certification pursuant to Paragraph 79 shall be signed by a managing officer of the third party and shall contain the following language:

I certify under penalty of law that, _____ [name of third party] will not sell, trade, or otherwise exchange any of the allowances and will not use any of the allowances to meet any obligation imposed by any environmental law. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.

XIII. REVIEW AND APPROVAL OF SUBMITTALS

126. DMG shall submit each plan, report, or other submission required by this Decree to the Plaintiff(s) specified whenever such a document is required to be submitted for review or approval pursuant to this Consent Decree. The Plaintiff(s) to whom the report is submitted, as required, may approve the submittal or decline to approve it and provide written comments

explaining the bases for declining such approval. Such Plaintiff(s) will endeavor to coordinate their comments into one document when explaining their bases for declining such approval. Within sixty (60) days of receiving written comments from any of the Plaintiffs, DMG shall either: (a) revise the submittal consistent with the written comments and provide the revised submittal to the Plaintiffs; or (b) submit the matter for dispute resolution, including the period of informal negotiations, under Section XVI (Dispute Resolution) of this Consent Decree.

127. Upon receipt of EPA's final approval of the submittal, or upon completion of the submittal pursuant to dispute resolution, DMG shall implement the approved submittal in accordance with the schedule specified therein or another EPA-approved schedule.

XIV. STIPULATED PENALTIES

128. For any failure by DMG to comply with the terms of this Consent Decree, and subject to the provisions of Sections XV (Force Majeure) and XVI (Dispute Resolution), DMG shall pay, within thirty (30) days after receipt of written demand to DMG by the United States, the following stipulated penalties to the United States:

Consent Decree Violation	Stipulated Penalty
a. Failure to pay the civil penalty as specified in Section IX (Civil Penalty) of this Consent Decree	\$10,000 per day
b. Failure to comply with any applicable 30-Day Rolling Average Emission Rate for NO _x or SO ₂ or Emission Rate for PM, where the violation is less than 5% in excess of the limits set forth in this Consent Decree	\$2,500 per day per violation
c. Failure to comply with any applicable 30-Day Rolling Average Emission Rate for NO _x or SO ₂ or Emission Rate for PM, where the violation is equal to or greater than 5% but less than 10% in excess of the limits set forth in this Consent Decree	\$5,000 per day per violation

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d. Failure to comply with any applicable 30-Day Rolling Average Emission Rate for NO _x or SO ₂ or Emission Rate for PM, where the violation is equal to or greater than 10% in excess of the limits set forth in this Consent Decree	\$10,000 per day per violation
e. Failure to comply with the System-Wide Annual Tonnage Limits for SO ₂ , where the violation is less than 100 tons in excess of the limits set forth in this Consent Decree	\$60,000 per calendar year, plus the surrender, pursuant to the procedures set forth in Paragraphs 79 and 80 of this Consent Decree, of SO ₂ Allowances in an amount equal to two times the number of tons by which the limitation was exceeded
f. Failure to comply with the System-Wide Annual Tonnage Limits for SO ₂ , where the violation is equal to or greater than 100 tons in excess of the limits set forth in this Consent Decree	\$120,000 per calendar year, plus the surrender, pursuant to the procedures set forth in Paragraphs 79 and 80 of this Consent Decree, of SO ₂ Allowances in an amount equal to two times the number of tons by which the limitation was exceeded
g. Failure to comply with the System-Wide Annual Tonnage Limits for NO _x , where the violation is less than 100 tons in excess of the limits set forth in this Consent Decree	\$60,000 per calendar year, plus the surrender of NO _x Allowances in an amount equal to two times the number of tons by which the limitation was exceeded
h. Failure to comply with the System-Wide Annual Tonnage Limits for NO _x , where the violation is equal to or greater than 100 tons in excess of the limits set forth in this Consent Decree	\$120,000 per calendar year, plus the surrender of NO _x Allowances in an amount equal to two times the number of tons by which the limitation was exceeded
i. Operation of a Unit required under this Consent Decree to be equipped with any NO _x , SO ₂ , or PM control device without the operation of such device, as required under this Consent Decree	\$10,000 per day per violation during the first 30 days, \$27,500 per day per violation thereafter
j. Failure to install or operate CEMS as required in this Consent Decree	\$1,000 per day per violation

k. Failure to conduct performance tests of PM emissions, as required in this Consent Decree	\$1,000 per day per violation
l. Failure to apply for any permit required by Section XVII	\$1,000 per day per violation
m. Failure to timely submit, modify, or implement, as approved, the reports, plans, studies, analyses, protocols, or other submittals required by this Consent Decree	\$750 per day per violation during the first ten days, \$1,000 per day per violation thereafter
n. Using, selling or transferring NO _x Allowances except as permitted by Paragraphs 60 and 61	the surrender of NO _x Allowances in an amount equal to four times the number of NO _x Allowances used, sold, or transferred in violation of this Consent Decree
o. Failure to surrender SO ₂ Allowances as required by Paragraph 75	(a) \$27,500 per day plus (b) \$1,000 per SO ₂ Allowance not surrendered
p. Failure to demonstrate the third-party surrender of an SO ₂ Allowance in accordance with Paragraph 79 and 80	\$2,500 per day per violation
q. Failure to undertake and complete any of the Environmental Mitigation Projects in compliance with Section VIII (Environmental Mitigation Projects) of this Consent Decree	\$1,000 per day per violation during the first 30 days, \$5,000 per day per violation thereafter
r. Any other violation of this Consent Decree	\$1,000 per day per violation

129. Violation of an Emission Rate that is based on a 30-Day Rolling Average is a violation on every day on which the average is based. Where a violation of a 30-Day Rolling Average Emission Rate (for the same pollutant and from the same source) recurs within periods of less than thirty (30) days, DMG shall not pay a daily stipulated penalty for any day of the recurrence for which a stipulated penalty has already been paid.

130. In any case in which the payment of a stipulated penalty includes the surrender of SO₂ Allowances, the provisions of Paragraph 76 shall not apply.

131. All stipulated penalties shall begin to accrue on the day after the performance is due or on the day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases, whichever is applicable. Nothing in this Consent Decree shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Consent Decree.

132. DMG shall pay all stipulated penalties to the United States within thirty (30) days of receipt of written demand to DMG from the United States, and shall continue to make such payments every thirty (30) days thereafter until the violation(s) no longer continues, unless DMG elects within 20 days of receipt of written demand to DMG from the United States to dispute the accrual of stipulated penalties in accordance with the provisions in Section XVI (Dispute Resolution) of this Consent Decree.

133. Stipulated penalties shall continue to accrue as provided in accordance with Paragraph 128 during any dispute, with interest on accrued stipulated penalties payable and calculated at the rate established by the Secretary of the Treasury, pursuant to 28 U.S.C. § 1961, but need not be paid until the following:

- a. If the dispute is resolved by agreement, or by a decision of Plaintiffs pursuant to Section XVI (Dispute Resolution) of this Consent Decree that is not appealed to the Court, accrued stipulated penalties agreed or determined to be owing, together with accrued interest, shall be paid within thirty (30) days of the effective date of the agreement or of the receipt of Plaintiffs' decision;
- b. If the dispute is appealed to the Court and Plaintiffs prevail in whole or in part, DMG shall, within sixty (60) days of receipt of the Court's decision or order, pay

all accrued stipulated penalties determined by the Court to be owing, together with interest accrued on such penalties determined by the Court to be owing, except as provided in Subparagraph c, below;

- c. If the Court's decision is appealed by any Party, DMG shall, within fifteen (15) days of receipt of the final appellate court decision, pay all accrued stipulated penalties determined to be owing, together with interest accrued on such stipulated penalties determined to be owing by the appellate court.

Notwithstanding any other provision of this Consent Decree, the accrued stipulated penalties agreed by the Plaintiffs and DMG, or determined by the Plaintiffs through Dispute Resolution, to be owing may be less than the stipulated penalty amounts set forth in Paragraph 128.

134. All stipulated penalties shall be paid in the manner set forth in Section IX (Civil Penalty) of this Consent Decree.

135. Should DMG fail to pay stipulated penalties in compliance with the terms of this Consent Decree, the United States shall be entitled to collect interest on such penalties, as provided for in 28 U.S.C. § 1961.

136. The stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States by reason of DMG's failure to comply with any requirement of this Consent Decree or applicable law, except that for any violation of the Act for which this Consent Decree provides for payment of a stipulated penalty, DMG shall be allowed a credit for stipulated penalties paid against any statutory penalties also imposed for such violation.

XV. FORCE MAJEURE

137. For purposes of this Consent Decree, a "Force Majeure Event" shall mean an event that has been or will be caused by circumstances beyond the control of DMG, its contractors, or any entity controlled by DMG that delays compliance with any provision of this Consent Decree or otherwise causes a violation of any provision of this Consent Decree despite DMG's best efforts to fulfill the obligation. "Best efforts to fulfill the obligation" include using best efforts to anticipate any potential Force Majeure Event and to address the effects of any such event (a) as it is occurring and (b) after it has occurred, such that the delay or violation is minimized to the greatest extent possible.

138. Notice of Force Majeure Events. If any event occurs or has occurred that may delay compliance with or otherwise cause a violation of any obligation under this Consent Decree, as to which DMG intends to assert a claim of Force Majeure, DMG shall notify the Plaintiffs in writing as soon as practicable, but in no event later than fourteen (14) business days following the date DMG first knew, or by the exercise of due diligence should have known, that the event caused or may cause such delay or violation. In this notice, DMG shall reference this Paragraph of this Consent Decree and describe the anticipated length of time that the delay or violation may persist, the cause or causes of the delay or violation, all measures taken or to be taken by DMG to prevent or minimize the delay or violation, the schedule by which DMG proposes to implement those measures, and DMG's rationale for attributing a delay or violation to a Force Majeure Event. DMG shall adopt all reasonable measures to avoid or minimize such delays or violations. DMG shall be deemed to know of any circumstance which DMG, its contractors, or any entity controlled by DMG knew or should have known.

139. Failure to Give Notice. If DMG fails to comply with the notice requirements of this Section, EPA (after consultation with the State of Illinois and the Citizen Plaintiffs) may void DMG's claim for Force Majeure as to the specific event for which DMG has failed to comply with such notice requirement.

140. Plaintiffs' Response. EPA shall notify DMG in writing regarding DMG's claim of Force Majeure within twenty (20) business days of receipt of the notice provided under Paragraph 138. If EPA (after consultation with the State of Illinois and the Citizen Plaintiffs) agrees that a delay in performance has been or will be caused by a Force Majeure Event, EPA and DMG shall stipulate to an extension of deadline(s) for performance of the affected compliance requirement(s) by a period equal to the delay actually caused by the event. In such circumstances, an appropriate modification shall be made pursuant to Section XXIII (Modification) of this Consent Decree.

141. Disagreement. If EPA (after consultation with the State of Illinois and the Citizen Plaintiffs) does not accept DMG's claim of Force Majeure, or if EPA and DMG cannot agree on the length of the delay actually caused by the Force Majeure Event, the matter shall be resolved in accordance with Section XVI (Dispute Resolution) of this Consent Decree.

142. Burden of Proof. In any dispute regarding Force Majeure, DMG shall bear the burden of proving that any delay in performance or any other violation of any requirement of this Consent Decree was caused by or will be caused by a Force Majeure Event. DMG shall also bear the burden of proving that DMG gave the notice required by this Section and the burden of proving the anticipated duration and extent of any delay(s) attributable to a Force Majeure Event.

An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date.

143. Events Excluded. Unanticipated or increased costs or expenses associated with the performance of DMG's obligations under this Consent Decree shall not constitute a Force Majeure Event.

144. Potential Force Majeure Events. The Parties agree that, depending upon the circumstances related to an event and DMG's response to such circumstances, the kinds of events listed below are among those that could qualify as Force Majeure Events within the meaning of this Section: construction, labor, or equipment delays; Malfunction of a Unit or emission control device; acts of God; acts of war or terrorism; and orders by a government official, government agency, other regulatory authority, or a regional transmission organization, acting under and authorized by applicable law, that directs DMG to supply electricity in response to a system-wide (state-wide or regional) emergency. Depending upon the circumstances and DMG's response to such circumstances, failure of a permitting authority to issue a necessary permit in a timely fashion may constitute a Force Majeure Event where the failure of the permitting authority to act is beyond the control of DMG and DMG has taken all steps available to it to obtain the necessary permit, including, but not limited to: submitting a complete permit application; responding to requests for additional information by the permitting authority in a timely fashion; and accepting lawful permit terms and conditions after expeditiously exhausting any legal rights to appeal terms and conditions imposed by the permitting authority.

145. As part of the resolution of any matter submitted to this Court under Section XVI (Dispute Resolution) of this Consent Decree regarding a claim of Force Majeure, the Plaintiffs

and DMG by agreement, or this Court by order, may in appropriate circumstances extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay agreed to by the United States and the States or approved by the Court. DMG shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule (provided that DMG shall not be precluded from making a further claim of Force Majeure with regard to meeting any such extended or modified schedule).

XVI. DISPUTE RESOLUTION

146. The dispute resolution procedure provided by this Section shall be available to resolve all disputes arising under this Consent Decree, provided that the Party invoking such procedure has first made a good faith attempt to resolve the matter with the other Party.

147. The dispute resolution procedure required herein shall be invoked by one Party giving written notice to the other Party advising of a dispute pursuant to this Section. The notice shall describe the nature of the dispute and shall state the noticing Party's position with regard to such dispute. The Party receiving such a notice shall acknowledge receipt of the notice, and the Parties in dispute shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) days following receipt of such notice.

148. Disputes submitted to dispute resolution under this Section shall, in the first instance, be the subject of informal negotiations among the disputing Parties. Such period of informal negotiations shall not extend beyond thirty (30) calendar days from the date of the first meeting among the disputing Parties' representatives unless they agree in writing to shorten or extend this period. During the informal negotiations period, the disputing Parties may also

submit their dispute to a mutually agreed upon alternative dispute resolution (ADR) forum if the Parties agree that the ADR activities can be completed within the 30-day informal negotiations period (or such longer period as the Parties may agree to in writing).

149. If the disputing Parties are unable to reach agreement during the informal negotiation period, the Plaintiffs shall provide DMG with a written summary of their position regarding the dispute. The written position provided by Plaintiffs shall be considered binding unless, within forty-five (45) calendar days thereafter, DMG seeks judicial resolution of the dispute by filing a petition with this Court. The Plaintiffs may respond to the petition within forty-five (45) calendar days of filing. In their initial filings with the Court under this Paragraph, the disputing Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute.

150. The time periods set out in this Section may be shortened or lengthened upon motion to the Court of one of the Parties to the dispute, explaining the party's basis for seeking such a scheduling modification.

151. This Court shall not draw any inferences nor establish any presumptions adverse to any disputing Party as a result of invocation of this Section or the disputing Parties' inability to reach agreement.

152. As part of the resolution of any dispute under this Section, in appropriate circumstances the disputing Parties may agree, or this Court may order, an extension or modification of the schedule for the completion of the activities required under this Consent Decree to account for the delay that occurred as a result of dispute resolution. DMG shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with

the extended or modified schedule, provided that DMG shall not be precluded from asserting that a Force Majeure Event has caused or may cause a delay in complying with the extended or modified schedule.

153. The Court shall decide all disputes pursuant to applicable principles of law for resolving such disputes. In their initial filings with the Court under Paragraph 149, the disputing Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute.

XVII. PERMITS

154. Unless expressly stated otherwise in this Consent Decree, in any instance where otherwise applicable law or this Consent Decree requires DMG to secure a permit to authorize construction or operation of any device contemplated herein, including all preconstruction, construction, and operating permits required under state law, DMG shall make such application in a timely manner. EPA and the State of Illinois shall use their best efforts to review expeditiously all permit applications submitted by DMG to meet the requirements of this Consent Decree.

155. Notwithstanding the previous Paragraph, nothing in this Consent Decree shall be construed to require DMG to apply for or obtain a PSD or Nonattainment NSR permit for physical changes in, or changes in the method of operation of, any DMG System Unit that would give rise to claims resolved by Section XI. A. (Resolution of Plaintiffs' Civil Claims) of this Consent Decree.

156. When permits are required as described in Paragraph 154, DMG shall complete and submit applications for such permits to the appropriate authorities to allow time for all

legally required processing and review of the permit request, including requests for additional information by the permitting authorities. Any failure by DMG to submit a timely permit application for any Unit in the DMG System shall bar any use by DMG of Section XV (Force Majeure) of this Consent Decree, where a Force Majeure claim is based on permitting delays.

157. Notwithstanding the reference to Title V permits in this Consent Decree, the enforcement of such permits shall be in accordance with their own terms and the Act. The Title V permits shall not be enforceable under this Consent Decree, although any term or limit established by or under this Consent Decree shall be enforceable under this Consent Decree regardless of whether such term has or will become part of a Title V permit, subject to the terms of Section XXVII (Conditional Termination of Enforcement Under Decree) of this Consent Decree.

158. Within one hundred eighty (180) days after entry of this Consent Decree, DMG shall amend any applicable Title V permit application, or apply for amendments of its Title V permits, to include a schedule for all Unit-specific performance, operational, maintenance, and control technology requirements established by this Consent Decree including, but not limited to, required emission rates and the requirement in Paragraph 75 pertaining to the surrender of SO₂ Allowances.

159. Within one (1) year from the commencement of operation of each pollution control device to be installed, upgraded, or operated under this Consent Decree, DMG shall apply to amend its Title V permit for the generating plant where such device is installed to reflect all new requirements applicable to that plant, including, but not limited to, any applicable 30-Day Rolling Average Emission Rate.

160. Prior to January 1, 2015, DMG shall either: (a) apply to amend the Title V permit for each plant in the DMG System to include a provision, which shall be identical for each Title V permit, that contains the allowance surrender requirements and the System-Wide Annual Tonnage Limitations set forth in this Consent Decree; or (b) apply for amendments to the Illinois State Implementation Plan to include such requirements and limitations therein.

161. DMG shall provide the Plaintiffs with a copy of each application to amend its Title V permit for a plant within the DMG System, as well as a copy of any permit proposed as a result of such application, to allow for timely participation in any public comment opportunity.

162. If DMG sells or transfers to an entity unrelated to DMG ("Third Party Purchaser") part or all of its Ownership Interest in a Unit in the DMG System, DMG shall comply with the requirements of Section XX (Sales or Transfers of Ownership Interests) with regard to that Unit prior to any such sale or transfer unless, following any such sale or transfer, DMG remains the holder of the Title V permit for such facility.

XVIII. INFORMATION COLLECTION AND RETENTION

163. Any authorized representative of the United States or the State of Illinois, including their attorneys, contractors, and consultants, upon presentation of credentials, shall have a right of entry upon the premises of any facility in the DMG System at any reasonable time for the purpose of:

- a. monitoring the progress of activities required under this Consent Decree;
- b. verifying any data or information submitted to the United States in accordance with the terms of this Consent Decree;

- c. obtaining samples and, upon request, splits of any samples taken by DMG or its representatives, contractors, or consultants; and
- d. assessing DMG's compliance with this Consent Decree.

164. DMG shall retain, and instruct its contractors and agents to preserve, all non-identical copies of all records and documents (including records and documents in electronic form) now in its or its contractors' or agents' possession or control, and that directly relate to DMG's performance of its obligations under this Consent Decree for the following periods: (a) until December 31, 2020 for records concerning physical or operational changes undertaken in accordance with Paragraph 114; and (b) until December 31, 2017 for all other records. This record retention requirement shall apply regardless of any corporate document retention policy to the contrary.

165. All information and documents submitted by DMG pursuant to this Consent Decree shall be subject to any requests under applicable law providing public disclosure of documents unless (a) the information and documents are subject to legal privileges or protection or (b) DMG claims and substantiates in accordance with 40 C.F.R. Part 2 that the information and documents contain confidential business information.

166. Nothing in this Consent Decree shall limit the authority of the EPA or the State of Illinois to conduct tests and inspections at DMG's facilities under Section 114 of the Act, 42 U.S.C. § 7414, or any other applicable federal or state laws, regulations or permits.

XIX. NOTICES

167. Unless otherwise provided herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

As to the United States of America:

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station
Washington, D.C. 20044-7611
DJ# 90-5-2-1-06837

and

Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
Ariel Rios Building [2242A]
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

and

Regional Administrator
U.S. EPA- Region 5
77 W. Jackson St.
Chicago, IL 60604

and

George Czerniak, Chief, AECAB
U.S. EPA- Region 5
77 W. Jackson St. - AE-17J
Chicago, IL 60604

As to the State of Illinois:

Bureau Chief
Bureau of Air

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Illinois Environmental Protection Agency
1021 North Grand Avenue East, P.O. Box 19276
Springfield, Illinois 62794-9276

and

Bureau Chief
Environmental Bureau
Illinois Attorney General's Office
500 South Second Street
Springfield, Illinois 62706

As to the Citizen Plaintiffs:

Executive Director
Environmental Law and Policy Center of the Midwest
35 East Wacker Dr. Suite 1300
Chicago, Illinois 60601-2110

As to DMG:

Vice President, Environmental Health & Safety
Dynergy Midwest Generation, Inc.
2828 North Mouroe Street
Decatur, Illinois 62526

and

Executive Vice President and General Counsel
Dynergy Inc.
1000 Louisiana Street, Suite 5800
Houston, Texas 77002

As to Illinois Power Company:

Senior Vice President, General Counsel, and Secretary
Illinois Power Company
One Ameren Plaza
1901 Chouteau Avenue
St. Louis, Missouri 63166

168. All notifications, communications or submissions made pursuant to this Section shall be sent either by: (a) overnight mail or overnight delivery service, or (b) certified or registered mail, return receipt requested. All notifications, communications and transmissions (a) sent by overnight, certified or registered mail shall be deemed submitted on the date they are postmarked, or (b) sent by overnight delivery service shall be deemed submitted on the date they are delivered to the delivery service.

169. Any Party may change either the notice recipient or the address for providing notices to it by serving all other Parties with a notice setting forth such new notice recipient or address.

XX. SALES OR TRANSFERS OF OWNERSHIP INTERESTS

170. If DMG proposes to sell or transfer an Ownership Interest to an entity unrelated to DMG ("Third Party Purchaser"), it shall advise the Third Party Purchaser in writing of the existence of this Consent Decree prior to such sale or transfer, and shall send a copy of such written notification to the Plaintiffs pursuant to Section XIX (Notices) of this Consent Decree at least sixty (60) days before such proposed sale or transfer.

171. No sale or transfer of an Ownership Interest shall take place before the Third Party Purchaser and EPA have executed, and the Court has approved, a modification pursuant to Section XXIII (Modification) of this Consent Decree making the Third Party Purchaser a party to this Consent Decree and jointly and severally liable with DMG for all the requirements of this Decree that may be applicable to the transferred or purchased Ownership Interests. Should Illinois Power (or any successor thereof) become a Third Party Purchaser or an operator (as the term "operator" is used and interpreted under the Clean Air Act) of any DMG System Unit, then

the provisions in Section X of this Consent Decree (Release and Covenant Not to Sue for Illinois Power Company) that apply to Illinois Power shall no longer apply as to the DMG System Unit(s) associated with the transfer, and instead, the Resolution of Plaintiffs' Civil Claims provisions in Section XI that apply to DMG shall apply to Illinois Power with respect to such transferred Unit(s), and such changes shall be reflected in the modification to the Decree reflecting the sale or transfer of an Ownership Interest contemplated by this Paragraph.

172. This Consent Decree shall not be construed to impede the transfer of any Ownership Interests between DMG and any Third Party Purchaser so long as the requirements of this Consent Decree are met. This Consent Decree shall not be construed to prohibit a contractual allocation – as between DMG and any Third Party Purchaser of Ownership Interests – of the burdens of compliance with this Decree, provided that both DMG and such Third Party Purchaser shall remain jointly and severally liable to EPA for the obligations of the Decree applicable to the transferred or purchased Ownership Interests.

173. If EPA agrees, EPA, DMG, and the Third Party Purchaser that has become a party to this Consent Decree pursuant to Paragraph 171, may execute a modification that relieves DMG of its liability under this Consent Decree for, and makes the Third Party Purchaser liable for, all obligations and liabilities applicable to the purchased or transferred Ownership Interests. Notwithstanding the foregoing, however, DMG may not assign, and may not be released from, any obligation under this Consent Decree that is not specific to the purchased or transferred Ownership Interests, including the obligations set forth in Sections VIII (Environmental Mitigation Projects) and IX (Civil Penalty). DMG may propose and the EPA may agree to restrict the scope of the joint and several liability of any purchaser or transferee for any

obligations of this Consent Decree that are not specific to the transferred or purchased Ownership Interests, to the extent such obligations may be adequately separated in an enforceable manner.

174. Paragraphs 170 and 171 of this Consent Decree do not apply if an Ownership Interest is sold or transferred solely as collateral security in order to consummate a financing arrangement (not including a sale-leaseback), so long as DMG: a) remains the operator (as that term is used and interpreted under the Clean Air Act) of the subject DMG System Unit(s); b) remains subject to and liable for all obligations and liabilities of this Consent Decree; and c) supplies Plaintiffs with the following certification within 30 days of the sale or transfer:

"Certification of Change in Ownership Interest Solely for Purpose of Consummating Financing. We, the Chief Executive Officer and General Counsel of Dynegy Midwest Generation, hereby jointly certify under Title 18 U.S.C. Section 1001, on our own behalf and on behalf of Dynegy Midwest Generation ("DMG"), that any change in DMG's Ownership Interest in any Unit that is caused by the sale or transfer as collateral security of such Ownership Interest in such Unit(s) pursuant to the financing agreement consummated on [insert applicable date] between DMG and [insert applicable entity]: a) is made solely for the purpose of providing collateral security in order to consummate a financing arrangement; b) does not impair DMG's ability, legally or otherwise, to comply timely with all terms and provisions of the Consent Decree entered in *United States of America, et al. v. Illinois Power Company and Dynegy Midwest Generation, Inc.*, Civil Action No. 99-833-MJR; c) does not affect DMG's operational control of any Unit covered by that Consent Decree in a manner that is inconsistent with DMG's performance of its obligations under the Consent Decree; and d) in no way affects the status of DMG's obligations or liabilities under that Consent Decree."

XXI. EFFECTIVE DATE

175. The effective date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court.

XXII. RETENTION OF JURISDICTION

176. The Court shall retain jurisdiction of this case after entry of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree and to take any action necessary or appropriate for its interpretation, construction, execution, modification, or adjudication of disputes. During the term of this Consent Decree, any Party to this Consent Decree may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.

XXIII. MODIFICATION

177. The terms of this Consent Decree may be modified only by a subsequent written agreement signed by the Plaintiffs and DMG. Where the modification constitutes a material change to any term of this Decree, it shall be effective only upon approval by the Court.

XXIV. GENERAL PROVISIONS

178. This Consent Decree is not a permit. Compliance with the terms of this Consent Decree does not guarantee compliance with all applicable federal, state, or local laws or regulations. The emission rates set forth herein do not relieve the Defendants from any obligation to comply with other state and federal requirements under the Clean Air Act, including the Defendants' obligation to satisfy any state modeling requirements set forth in the Illinois State Implementation Plan.

179. This Consent Decree does not apply to any claim(s) of alleged criminal liability.

180. In any subsequent administrative or judicial action initiated by any of the Plaintiffs for injunctive relief or civil penalties relating to the facilities covered by this Consent

Decree, the Defendants shall not assert any defense or claim based upon principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, or claim splitting, or any other defense based upon the contention that the claims raised by any of the Plaintiffs in the subsequent proceeding were brought, or should have been brought, in the instant case; provided, however, that nothing in this Paragraph is intended to affect the validity of Sections X (Release and Covenant Not to Sue for Illinois Power Company) and XI (Resolution of Plaintiffs' Civil Claims Against DMG).

181. Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve the Defendants of their obligation to comply with all applicable federal, state, and local laws and regulations. Subject to the provisions in Sections X (Release and Covenant Not to Sue for Illinois Power Company) and XI (Resolution of Plaintiffs' Civil Claims Against DMG), nothing contained in this Consent Decree shall be construed to prevent or limit the rights of the Plaintiffs to obtain penalties or injunctive relief under the Act or other federal, state, or local statutes, regulations, or permits.

182. Every term expressly defined by this Consent Decree shall have the meaning given to that term by this Consent Decree and, except as otherwise provided in this Decree, every other term used in this Decree that is also a term under the Act or the regulations implementing the Act shall mean in this Decree what such term means under the Act or those implementing regulations.

183. Nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law (including but not limited to any defenses, entitlements, challenges, or

clarifications related to the Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997)) concerning the use of data for any purpose under the Act.

184. Each limit and/or other requirement established by or under this Decree is a separate, independent requirement.

185. Performance standards, emissions limits, and other quantitative standards set by or under this Consent Decree must be met to the number of significant digits in which the standard or limit is expressed. For example, an Emission Rate of 0.100 is not met if the actual Emission Rate is 0.101. DMG shall round the fourth significant digit to the nearest third significant digit, or the third significant digit to the nearest second significant digit, depending upon whether the limit is expressed to three or two significant digits. For example, if an actual Emission Rate is 0.1004, that shall be reported as 0.100, and shall be in compliance with an Emission Rate of 0.100, and if an actual Emission Rate is 0.1005, that shall be reported as 0.101, and shall not be in compliance with an Emission Rate of 0.100. DMG shall report data to the number of significant digits in which the standard or limit is expressed.

186. This Consent Decree does not limit, enlarge or affect the rights of any Party to this Consent Decree as against any third parties.

187. This Consent Decree constitutes the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Consent Decree, and supercedes all prior agreements and understandings among the Parties related to the subject matter herein. No document, representation, inducement, agreement, understanding, or promise constitutes any part of this Decree or the settlement it represents, nor shall they be used in construing the terms of this Consent Decree.

188. Each Party to this action shall bear its own costs and attorneys' fees.

XXV. SIGNATORIES AND SERVICE

189. Each undersigned representative of the Parties certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind to this document the Party he or she represents.

190. This Consent Decree may be signed in counterparts, and such counterpart signature pages shall be given full force and effect.

191. Each Party hereby agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

XXVI. PUBLIC COMMENT

192. The Parties agree and acknowledge that final approval by the United States and entry of this Consent Decree is subject to the procedures of 28 C.F.R. § 50.7, which provides for notice of the lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and the right of the United States to withdraw or withhold consent if the comments disclose facts or considerations which indicate that the Consent Decree is inappropriate, improper or inadequate. The Defendants shall not oppose entry of this Consent Decree by this Court or challenge any provision of this Consent Decree unless the United States has notified the Defendants, in writing, that the United States no longer supports entry of the Consent Decree.

XXVII. CONDITIONAL TERMINATION OF ENFORCEMENT UNDER DECREE

193. Termination as to Completed Tasks. As soon as DMG completes a construction project or any other requirement of this Consent Decree that is not ongoing or recurring, DMG may, by motion to this Court, seek termination of the provision or provisions of this Consent Decree that imposed the requirement.

194. Conditional Termination of Enforcement Through the Consent Decree. After DMG:

- a. has successfully completed construction, and has maintained operation, of all pollution controls as required by this Consent Decree;
- b. has obtained final Title V permits (i) as required by the terms of this Consent Decree; (ii) that cover all units in this Consent Decree; and (iii) that include as enforceable permit terms all of the Unit performance and other requirements specified in Section XVII (Permits) of this Consent Decree; and
- c. certifies that the date is later than December 31, 2015;

then DMG may so certify these facts to the Plaintiffs and this Court. If the Plaintiffs do not object in writing with specific reasons within forty-five (45) days of receipt of DMG's certification, then, for any Consent Decree violations that occur after the filing of notice, the Plaintiffs shall pursue enforcement of the requirements contained in the Title V permit through the applicable Title V permit and not through this Consent Decree.

195. Resort to Enforcement under this Consent Decree. Notwithstanding Paragraph 194, if enforcement of a provision in this Decree cannot be pursued by a party under the

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applicable Title V permit, or if a Decree requirement was intended to be part of a Title V Permit and did not become or remain part of such permit, then such requirement may be enforced under the terms of this Decree at any time.

XXVIII. FINAL JUDGMENT

196. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment among the Plaintiffs, DMG, and Illinois Power.

SO ORDERED, THIS 27th DAY OF MAY, 2005.

s/ Michael J. Reagan
HONORABLE MICHAEL J. REAGAN
UNITED STATES DISTRICT JUDGE

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Signature Page for Consent Decree in:

United States of America
v.
Illinois Power and Dynegy Midwest Generation Inc.

FOR THE UNITED STATES OF AMERICA¹:

s/Thomas L. Sansonetti
THOMAS L. SANSONETTI
Assistant Attorney General
Environmental and Natural Resources Division
United States Department of Justice

s/Nicole Veilleux
DAVID ROSSKAM
Senior Counsel
NICOLE VEILLEUX
Trial Attorney
Environmental Enforcement Section
Environmental and Natural Resources Division
United States Department of Justice

s/William E. Coonan
WILLIAM E. COONAN
Assistant United States Attorney
Southern District of Illinois
United States Department of Justice

¹ Original signatures for each of the following signatories for the United States are in the Consent Decree bearing the original signatures of all parties, on file with the Clerk of Court as an exhibit to the United States' Notice of Lodging of Proposed Consent Decree (Doc. 684).

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Signature Page for Consent Decree in:

United States of America
v.
Illinois Power Company and Dynegy Midwest Generation Inc.

s/Thomas V. Skinner
THOMAS V. SKINNER
Acting Assistant Administrator
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency

s/Adam M. Kushner
ADAM M. KUSHNER
Acting Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency

s/Edward J. Messina
EDWARD J. MESSINA
Attorney Advisor
Air Enforcement Division
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency

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Signature Page for Consent Decree in:

United States of America

v.

Illinois Power Company and Dynegy Midwest Generation Inc.

s/Bharat Mathur

BHARAT MATHUR

Acting Regional Administrator

U.S. Environmental Protection Agency

Region 5

s/Mark J. Palermo

MARK J. PALERMO

Associate Regional Counsel

U.S. Environmental Protection Agency

Region 5

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Signature Page for Consent Decree in:

United States of America
v.
Illinois Power Company and Dynegy Midwest Generation Inc.

FOR THE STATE OF ILLINOIS
PEOPLE OF THE STATE OF ILLINOIS ex rel:

LISA MADIGAN
Attorney General of the State of Illinois

MATTHEW J. DUNN, Chief
Environmental Enforcement/Asbestos
Litigation Division

s/Thomas Davis²
by: THOMAS DAVIS, Chief
Environmental Bureau
Assistant Attorney General

² On March 17, 2005, Nicole Veilleux, counsel for Plaintiff United States, obtained consent of Thomas Davis to affix on his behalf this electronic signature. The original signature is in the Consent Decree bearing the original signatures of all parties, on file with the Clerk of Court as an exhibit to the United States' Notice of Lodging of Proposed Consent Decree (Doc. 684).

Case 3:99-cv-00833-MJR-CJP Document 695 Filed 05/27/05 Page 80 of 87 Page ID #876

Signature Page for Consent Decree in:

United States of America

v.

Illinois Power Company and Dynegy Midwest Generation Inc.

FOR CITIZEN PLAINTIFFS:

s/Albert Ettinger³
ALBERT ETTINGER
Senior Staff Attorney
Environmental Law and Policy Center of the Midwest

³ On March 16, 2005, Nicole Veilleux, counsel for Plaintiff United States, obtained consent of Albert Ettinger to affix on his behalf this electronic signature. The original signature is in the Consent Decree bearing the original signatures of all parties, on file with the Clerk of Court as an exhibit to the United States' Notice of Lodging of Proposed Consent Decree (Doc. 684).

Case 3:99-cv-00833-MJR-CJP Document 695 Filed 05/27/05 Page 81 of 87 Page ID #877

Signature Page for Consent Decree in:

United States of America

v.

Illinois Power Company and Dynegy Midwest Generation Inc.

FOR DYNEGY MIDWEST GENERATION:

s/Alec G. Dreyer[‡]

ALEC G. DREYER

President

Dynegy Midwest Generation, Inc.

[‡] On March 17, 2005, David Roskam, counsel for Plaintiff United States, obtained consent of counsel for Dynegy Midwest Generation, Inc., James W. Ingram, to affix on Mr. Dreyer's behalf this electronic signature. The original signature is in the Consent Decree bearing the original signatures of all parties, on file with the Clerk of Court as an exhibit to the United States' Notice of Lodging of Proposed Consent Decree (Doc. 684).

Case 3:99-cv-00833-MJR-CJP Document 695 Filed 05/27/05 Page 82 of 87 Page ID #878

Signature Page for Consent Decree in:

United States of America
v.
Illinois Power Company and Dynegy Midwest Generation Inc.

FOR ILLINOIS POWER COMPANY:

s/Steven R. Sullivan⁵
STEVEN R. SULLIVAN
Senior Vice President, General Counsel and Secretary
Illinois Power Company

⁵ On April 20, 2005, David Roskam, counsel for Plaintiff United States, obtained consent of Susan B. Knowles, counsel for Illinois Power Company, to affix on Mr. Sullivan's behalf this electronic signature. The original signature is in the Consent Decree bearing the original signatures of all parties, on file with the Clerk of Court as an exhibit to the United States' Notice of Lodging of Proposed Consent Decree (Doc. 684).

APPENDIX A - MITIGATION PROJECTS REQUIREMENTS

In compliance with and in addition to the requirements in Section VIII of the Consent Decree, DMG shall comply with the requirements of this Appendix to ensure that the benefits of the environmental mitigation projects are achieved.

I. Advanced Truck Stop Electrification Project

A. Within one hundred thirty five (135) days after entry of this Consent Decree, DMG shall submit a plan to the Plaintiffs for review and approval for the completion of the installation of Advanced Truck Stop Electrification, preferably at State of Illinois owned rest areas along Illinois interstate highways in the St. Louis Metro East area (comprised of Madison, St. Clair and Mouroe Counties in Illinois) or as nearby as possible. Long-haul truck drivers typically idle their engines at night at rest areas to supply heat or cooling in their sleeper cab compartments, and to maintain vehicle battery charge while electrical appliances such as TVs, computers and microwaves are in use. Modifications to rest areas to provide parking spaces with electrical power, heat and air conditioning will allow truck drivers to turn their engines off. Truck driver utilization of the Advanced Truck Stop Electrification will result in reduced idling time and therefore reduced fuel usage, reduced emissions of PM, NOx, VOCs and toxics, and reduced noise. This Project shall include, where necessary, techniques and infrastructure needed to support such project. DMG shall spend no less than \$1.5 million in Project Dollars in performing this Advanced Truck Stop Electrification Project.

B. The proposed plan shall satisfy the following criteria:

1. Describe how the work or project to be performed is consistent with requirements of Section I. A., above.
2. Involve rest areas located in areas that are either in the St. Louis Metro East area (comprised of Madison, St. Clair and Mouroe Counties in Illinois) or as nearby as reasonably possible.
3. Provide for the construction of Advanced Truck Stop Electrification stations with established technologies and equipment designed to reduce emissions of particulates and/or ozone precursors.
4. Account for hardware procurement and installation costs at the recipient truck stops.
5. Include a schedule for completing each portion of the project.
6. Describe generally the expected environmental benefits of the project.
7. DMG shall not profit from this project for the first five years of implementation.

C. Performance - Upon approval of plan by the Plaintiffs, DMG shall complete the mitigation project according to the approved plan and schedule, but no later than December 31, 2007.

II. Middle Fork/Vermilion Land Donation

A. Within sixty (60) days after entry of the Consent Decree, DMG shall submit a plan to the Plaintiffs for review and approval for the transfer of ownership to the State of Illinois Department of Natural Resources (IDNR), of an approximately 1135 acre parcel of land along the Middle Fork Vermilion River in Vermilion County identified as the Middle Fork/Vermilion ("Property"). The value of the Property to be donated can be fairly valued at \$2.25 million. Accordingly, DMG's full and final transfer of the Property in accordance with the plan shall satisfy its requirement to spend at least \$2.25 million Project Dollars to implement this project.

B. The proposed plan shall satisfy the following criteria:

1. Describe how the work or project to be performed is consistent with requirements of Section II. A., above.
2. This project entails the donation of the entire parcel of land owned by DMG (an approximately 1135 acre parcel of land) as of lodging of the Consent Decree along the East side of the Middle Fork Vermilion River in Vermilion County. The Property is located between Kickapoo State Park and the Middle Fork State Fish and Wildlife Area and Kennekuk County Park on the East side of the Middle Fork of the Vermilion River. Ownership of the Property and management of the natural resources thereon shall be transferred to IDNR so as to ensure the continued preservation and public use of the Property.
3. The plan shall include DMG's agreement to convey to IDNR, the Property, the Ancillary Structures and the Personal Property, if any, to the extent located on the Property, and to the extent owned by DMG. The plan shall include steps for resolution of all past liens, payment of all outstanding taxes, title transfer, and other such information as would be necessary to convey the Property to IDNR. In all other respects, the Property will be conveyed subject to the easements, rights-of-way and similar rights of third parties existing as of the date of the conveyance.
4. DMG shall retain its existing right to take and use the water from a stripmine lake located in the NW ¼ of Section 28, T-20_N, R-12-W, 3 P.M. and in the NE ¼ of Section 29, T-20_N, R-12-W, 3rd P.M. of Vermillion County, and an easement to access this water and to provide electrical power to pump the water.
5. DMG agrees to furnish to IDNR a current Alta/ACSM Land Title Survey of the Property prepared and certified by an Illinois registered land surveyor.
6. Describe generally the expected environmental benefit for the project.

C. Performance - Upon approval of plan by the Plaintiffs, DMG shall complete the mitigation project according to the approved plan and schedule, and convey such Property prior to the date 180 days from entry of this Consent Decree or June 30, 2006, whichever is earlier.

III. Metro East Land Acquisition and Preservation and Illinois River Projects

A. Within sixty (60) days after entry of the Consent Decree, and following consultation with Plaintiffs, including on behalf of the State of Illinois, the Illinois Department of Natural Resources, DMG shall submit a plan to the Plaintiffs for review and approval for the transfer of \$2.75 million to the Illinois Conservation Foundation, 20 ILCS 880/15 (2004). The funds transferred by DMG to the Illinois Conservation Foundation shall be used for the express purpose of acquiring natural lands and habitat in the St Louis Metro East area, for acquiring and/or restoring endangered habitat along the Illinois River, and for future funding of the Illinois River Sediment Removal and Beneficial Reuse Initiative, administered by the Waste Management Resource Center of IDNR. In addition, to the extent possible, the funding shall be utilized to enhance existing wetlands and create new wetlands restoration projects at sites along the Illinois River between DMG's Havana Station and the Hennepin Station, and provide for public use of acquired areas in a manner consistent with the ecology and historic uses of the area. Further, to the extent possible, the funding shall enable the removal and transport of high quality soil sediments from the Illinois River bottom to end users, including State fish and wildlife areas, a local environmental remediation project, and other projects deemed beneficial by plaintiffs. Any properties acquired through funding of this project shall be placed in the permanent ownership of the State of Illinois and preserved for public use by IDNR.

B. The proposed plan shall satisfy the following criteria:

1. Describe how the work or project to be performed is consistent with requirements of Section III. A., above.
2. Include a schedule for completing the funding of each portion of the project.
3. Describe generally the expected environmental benefit for the project.

C. Performance - Upon approval of plan by the Plaintiffs, DMG shall complete the mitigation project according to the approved plan and schedule, but no later than December 31, 2007.

IV. Vermilion Power Station Mercury Control Project

A. Within sixty (60) days of entry of the Consent Decree, DMG shall submit a plan to the Plaintiffs for review and approval for the performance of the Vermilion Power Station Mercury Control Project. The project will result in the installation of a baghouse, along with a sorbent injection system, to control mercury emissions from Vermilion Units 1 and 2, with a goal of achieving 90% mercury reduction. For purposes of the Consent Decree, of the approximately \$26.0 million expected capital cost for construction and installation of the baghouse with a sorbent injection system, DMG shall be deemed to have expended \$7.5 million Project Dollars upon commencement of operation of this control technology, provided that DMG continues to operate the control technology for five (5) years and surrenders any mercury allowances and/or mercury reduction credits, as applicable, during the five (5) year period. DMG shall complete

construction and installation of the baghouse with a sorbent injection system, and commence operation of such control device, no later than June 30, 2007.

- B. The proposed plan shall satisfy the following criteria:
1. Describe how the work or project to be performed is consistent with requirements of Section IV. A., above.
 2. Include a general schedule and budget for completion of the construction of the baghouse and sorbent injection system, along with a plan for the submittal of periodic reports to the Plaintiffs on the progress of the work through completion of the construction and the commencement of operation of the baghouse and sorbent injection system.
 3. The sorbent injection system shall be designed to inject sufficient amounts of sorbent to collect (and remove) mercury emissions from the coal-fired boilers and to promote the goal of achieving a total mercury reduction of 90%.
 4. DMG shall not be permitted to benefit, under any federal or state mercury cap and trade program, from the operation of this project before June 30, 2012 (if such a cap and trade system is legally in effect at that time). Specifically, DMG shall not be permitted to sell, or use within its system, any mercury allowances and/or mercury reduction credits earned through resulting mercury reductions under any Mercury MACT rule or other state or federal mercury credit/allowance trading program, through June 30, 2012.
 5. From July 1, 2007 through June 30, 2012, DMG shall surrender to EPA any and all mercury credits/allowances obtained through mercury reductions resulting from this project.
 6. DMG shall provide the Plaintiffs, upon completion of the construction and continuing for five (5) years thereafter, with semi-annual updates documenting: a) the mercury reduction achieved, including summaries of all mercury testing and any available continuous emissions monitoring data; and b) any mercury allowances and/or mercury reduction credits earned through resulting mercury reductions under any Mercury MACT rule or other state or federal mercury credit/allowance trading program, and surrender thereof. DMG also shall make such semi-annual updates concerning the performance of the project available to the public. Such information disclosure shall include, but not be limited to, release of semi-annual progress reports clearly identifying demonstrated removal efficiencies of mercury, sorbent injection rates, and cost effectiveness.
 7. Describe generally the expected environmental benefit for the project.
- C. Performance - Upon approval of plan by the Plaintiffs, DMG shall complete the mitigation project according to the approved plan and schedule.

V. Municipal and Educational Building Energy Conservation & Energy Efficiency Projects

A. Within one hundred thirty five (135) days after entry of the Consent Decree, DMG shall submit a plan to Plaintiffs for review and approval for the completion of the Municipal and Educational Building Energy Conservation & Energy Efficiency Projects, as described herein. DMG shall spend no less than \$1.0 million Project Dollars for the purchase and installation of environmentally beneficial energy technologies for muunicipal and public educational buildings in the Metro East area or the City of St. Louis.

B. The proposed plan shall satisfy the following criteria:

1. Describe how the work or project to be performed is consistent with requirements of Section V. A., above.
2. Include a general schedule and budget (for \$1.0 million) for completion of the projects.
3. Describe generally the expected environmental benefit for the project.

C. Performance - Upon approval of plan by the Plaintiffs, DMG shall complete the mitigation project according to the approved plan and schedule, but no later than December 31, 2007.

10.8 Attachment 8 - Order Modifying Consent Decree

(Copy of August 9, 2006 Order Modifying the Consent Decree in the matter of *United States of America and the State of Illinois, American Bottom Conservancy, Health and Environmental Justice-St. Louis, Inc., Illinois Stewardship Alliance, and Prairie Rivers Network, v. Illinois Power Company and Dynegy Midwest Generation, Inc.*, Civil Action No. 99-833-MJR, U.S. District Court, Southern District of Illinois)

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF ILLINOIS

UNITED STATES OF AMERICA,)	
)	
Plaintiff,)	
)	
and)	
)	
THE STATE OF ILLINOIS, AMERICAN)	
BOTTOM CONSERVANCY, HEALTH AND)	
ENVIRONMENTAL JUSTICE – ST. LOUIS,)	
INC., ILLINOIS STEWARDSHIP ALLIANCE,)	
and PRAIRIE RIVERS NETWORK)	
)	
Plaintiff-Intervenors)	
)	
v.)	Civil Action No. 99-833-MJR
)	
ILLINOIS POWER COMPANY and)	
DYNEGY MIDWEST GENERATION, INC.,)	
)	
Defendants.)	
)	

ORDER

THIS MATTER comes before the Court upon the “United States’ Motion to Enter Proposed Consent Decree Modifications” (Doc. 703) which includes the parties’ “Joint Stipulation to Modify Consent Decree.” Therein, the parties seek to modify particular provisions of the Consent Decree entered in this matter on May 27, 2005 (Doc. 695).

With respect to Section VI of the Consent Decree, concerning particulate matter (“PM”) emission reduction and control requirements, the United States lodged proposed modifications with the Court on March 20, 2006 (Doc. 702), pending publication of a notice in the Federal Register and an opportunity for public comment on the proposed modifications. Thereafter, the United States published such notice at 71 Fed. Reg. 27516 (May 11, 2006), and represents that it

received no public comments concerning the proposed modifications during the 30-day period following publication of the notice.

The proposed modifications to the PM provisions are (1) to delete entirely the provisions that provide Dynegy Midwest Generation, Inc. ("DMG") with the option to perform a Pollution Control Equipment Upgrade Analysis in lieu of meeting the default emissions rate of 0.030 lbs/mmBTU for any of the seven units named in the Decree; instead, each of these seven units would be required to meet the rate of 0.030 lb/mmBTU by the dates specified, and (2) to set the same December 31, 2008 deadline for the two Hennepin units to be in compliance with the 0.030 lbs/mmBTU emission limit under the Consent Decree instead of permitting DMG to comply with this emission rate at one Hennepin unit by December 31, 2006 and at the other Hennepin unit by December 31, 2010. The United States explains that this modification will result in sooner overall PM emission reductions than would the original provisions if DMG had exercised its option under the Consent Decree's original terms to control the smaller Hennepin unit by the earlier date and the larger unit by the later date.

With respect to the requirement in Appendix A to the Consent Decree concerning the deadline for DMG to convey the Middle Fork/Vermilion Property ("Property") to the State of Illinois Department of Natural Resources ("IDNR"), the Court previously entered the parties' joint request to extend this date to June 30, 2006. Doc. 699. The parties now seek a modification to Appendix A to provide for an additional extension until September 30, 2006 due to numerous difficulties DMG has encountered during the land survey process, including easements and encroachments on the property.

Upon careful consideration of the United States' Motion to Enter Proposed Consent Decree Modifications, the Court is satisfied that the proposed modifications are justified and in

the public interest. All parties support entry of these modifications, and no public comments were submitted in opposition. Therefore, IT IS HEREBY ORDERED, ADJUDGED and DECREED that, pursuant to the parties' Joint Stipulation to Modify Consent Decree, the Consent Decree entered in this matter on May 27, 2005, is amended as provided below:

1. Paragraph 86 of the Consent Decree is modified as follows:

"86. At each unit listed below, no later than the dates specified, and continuing thereafter, DMG shall operate ESPs or alternative PM control equipment at the following Units to achieve and maintain a PM emissions rate of not greater than 0.030 lb/mmBTU:

Unit	Date
Havana Unit 6	December 31, 2005
1 st Wood River Unit (i.e., either of Wood River Units 4 or 5)	December 31, 2005
2 nd Wood River Unit (i.e., the remaining Wood River Unit)	December 31, 2007
1 st Hennepin Unit (i.e., either of Hennepin Units 1 or 2)	December 31, 2006 December 31, 2008
2 nd Hennepin Unit (i.e., the remaining Hennepin Unit)	December 31, 2010 December 31, 2008
1 st Vermilion Unit (i.e., either of Vermilion Units 1 or 2)	December 31, 2010
2 nd Vermilion Unit (i.e., the remaining Vermilion Unit)	December 31, 2010

[Remainder of Paragraph deleted.]"

2. Paragraph 88 is deleted in its entirety, and replaced with a paragraph placeholder, as follows:

"88. [Omitted.]"

3. Appendix A, Subsection II, Paragraph C, is modified as follows:

Performance – Upon approval of plan by the Plaintiffs, DMG shall complete the mitigation project according to the approved plan and schedule, and convey such Property no later than ~~June 30, 2006~~ September 30, 2006.

4. All provisions of the Consent Decree unaffected by the foregoing modifications shall operate in conjunction with these new provisions in the same manner and to the same extent as did the substituted language in the original Consent Decree; and

5. Except as specifically provided in this Order, all other terms and conditions of the Consent Decree will remain unchanged and in full effect.

DONE and ORDERED this 9th day of August, 2006.

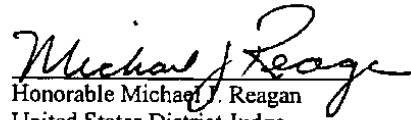

Honorable Michael J. Reagan
United States District Judge

EXHIBIT B



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

JB PRITZKER, GOVERNOR

JOHN J. KIM, ACTING DIRECTOR

217/785-1705

"REVISED"

CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE

Kincaid Generation, LLC
Attn: Phil Morris
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

Application No.: 95090078

I.D. No.: 021814AAB

Operation of: Kincaid Power Station

Original Date Received: September 07, 1995

Original Date Issued: September 29, 2005

Initial Effective Date: February 05, 2015

Expiration Date¹: February 05, 2020

Source Location: Four Miles West of Kincaid on Route 104 (Christian County)

Responsible Official: Ted Lindenbusch, Plant Manager

Alternate Responsible Official: Phil Morris, Senior Director, Environmental Services

Permit Authorization:

This permit is hereby granted to the above-designated Permittee for operation of the above-referenced source. This permit is subject to the terms and conditions contained herein.

Type of Permit Revision: Administrative Amendment (AA)

Date Revision Received: April 3, 2019

Date Revised Permit Issued: April 4, 2019

This permit authorization has been provided for this revision of the CAAPP permit that have been made by the procedures for administrative amendment of CAAPP permits at Section 39.5(13)(c) of the Illinois Environmental Protection Act. This administrative amendment consists of a change in the Responsible Official's Title and a change of Operator. Because the changes in the permit were only administrative, no formal public notice was issued.

If you have any questions concerning this permit, please contact the CAAPP Unit at 217/785-1705.

Raymond E. Pilapil
Manager, Permit Section
Bureau of Air

REP:MTR:DLR:jlpl

cc: Illinois EPA, FOS, Region 2
USEPA

¹ Except as addressed in Condition 8.7 of this permit.

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Section 1.0 - Introduction

1.0 INTRODUCTION

1.1 Source Identification

Kincaid Power Station
4 Miles West of Kincaid on Route 104
Kincaid, Illinois 62540
217/237-4311 Ext. 2291

I.D. No.: 021814AAB
Acid Rain Permit ORIS Code No.: 876

Standard Industrial Classification: 4911, Electrical Services

1.2 Owner/Parent Company

Kincaid Generation, LLC
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

1.3 Operator

Kincaid Generation, LLC
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

Phil Morris
618/343-7794

1.4 General Source Description

The Permittee, Kincaid Generation, LLC operates two coal-fired boilers to produce electricity.

1.5 Title I Conditions

This CAAPP permit contains certain conditions for units at this source that address the applicability of permitting programs for the construction and modification of sources, which programs were established pursuant to Title I of the Clean Air Act (CAA) and regulations thereunder. These programs include 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification (MSSCAM), and are implemented by the Illinois EPA pursuant to Sections 9, 9.1, 39(a) and 39.5(7)(a) of Illinois' Environmental Protection Act (Act). These "Title I conditions" within this permit are specifically designated as "T1", if they reflect requirements established in construction permits issued for this source, "T1R" if they revise requirements established in such construction permits, or "T1N" if they are newly established in this CAAPP permit. These conditions continue in effect, notwithstanding the expiration date specified on the first page

Section 1.0 - Introduction

of this permit, as their authority derives from Titles I and V of the CAA, as well as Titles II and X of the Act. (See also Condition 8.7.)

Section 2.0 - List of Abbreviations and Acronyms

2.0 LIST OF ABBREVIATIONS AND ACRONYMS USED IN THIS PERMIT

acfm	actual cubic feet per minute
ACI	Activated Carbon Injection
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
BART	Best Available Retrofit Technology
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAIR	Clean Air Interstate Rule
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CMS	Continuous Monitoring System(s)
CO	Carbon Monoxide
CSAPR	Cross-State Air Pollution Rule
dcfm	dry cubic feet per minute
DSI	Dry Sorbent Injection
EGU	Electrical Generating Unit(s)
ESP	Electrostatic Precipitator
°F	degrees Fahrenheit
FGC	Flue Gas Conditioning
FGD	Flue Gas Desulfurization
ft	foot
ft ³	cubic foot
Gal	Gallon
GWh	Gigawatt hour (1.0E+3 MWh)
HAP	Hazardous Air Pollutant
HP	horsepower
hr	Hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
°K	degrees Kelvin
Kg	kilogram
kW	Kilowatts
lb	Pound
LNB	Low NOx Burners
m	meter
MACT	Maximum Achievable Control Technology
MATS	Mercury and Air Toxics Standard - 40 CFR 63 Subpart UUUUU
mmBtu	million British thermal units
MW	Megawatts
MWh	Megawatt hour

Section 2.0 - List of Abbreviations and Acronyms

NESHAP	National Emission Standards for Hazardous Air Pollutants
NOx	Nitrogen Oxides
NSPS	New Source Performance Standards (40 CFR Part 60)
NSSA	New Source Set-Aside
ORIS	Office of Regulatory Information System
OFA	Over-Fire Air
OM	organic material
PM	Particulate Matter
PM CPMS	Particulate Matter Continuous Parametric Monitoring System
PM _{2.5}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration (40 CFR 52.21)
psia	pounds per square inch absolute
RATA	Relative Accuracy Test Audit
RMP	Risk Management Plan
SCR	Selective Catalytic Reduction
SO ₂	Sulfur Dioxide
T	ton (2000 pounds)
TBtu	1.0E+12 British thermal units
TR	Transport Rule
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOC or VOM	volatile organic compounds or volatile organic material
VOL	volatile organic liquid
yr	year

Section 3.0 - Conditions for Insignificant Activities

3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

- 3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

None

- 3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

Sulfuric Acid Storage Tanks
Ammonium Hydroxide Storage Tank
Two Anhydrous Ammonia Storage Tanks
Sodium Hypochlorite Storage Tank(s)
Diesel Fuel Unloading
CyClean Fuel Additives System Test Facility
ACI Silo with Bin Vent

- 3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

Equipment used for filling drums, pails, or other packaging containers, excluding aerosol cans, with soaps, detergents, surfactants, lubricating oils, waxes, vegetable oils, greases, animal fats, glycerin, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(8)].

Section 3.0 - Conditions for Insignificant Activities

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1,118 kW (150 and 1,500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a)(16)].

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

- 3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

Note: The heating of a coal-fired boiler with auxiliary fuel during maintenance and repair of the boiler is considered an insignificant activity under 35 IAC 201.210(b)(29) and is generally not addressed by the unit-specific conditions of this permit for coal fired boilers. Notwithstanding such status as an insignificant activity, the opacity of the exhaust from each coal fired boiler is at all times subject to the applicable opacity standard and the unit-specific conditions of this permit for boilers that relate to opacity are applicable during maintenance and repair of a boiler.

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182.
- 3.2.2 For each particulate matter process emission unit, other than units excluded by 35 IAC 212.323 or 212.681, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process

Section 3.0 - Conditions for Insignificant Activities

emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.

- 3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.3 Addition of Insignificant Activities

- 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).
- 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.
- 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

Section 4.0 - Emission Units

4.0 EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Emission Control Equipment/Measures	Ref*
Insignificant Activities			3.0
Boiler 1 BLR-1	Babcock and Wilcox Boiler	OFA, SCR, ESP, DSI and ACI	7.1
Boiler 2 BLR-2	Babcock and Wilcox Boiler	OFA, SCR, ESP, DSI and ACI	
Coal Handling Equipment	Coal Transfer and Storage Operations	Enclosures and Covers, Dust Suppression, and Dust Collection Devices	7.2
Coal Processing Equipment	Coal Crushing Operation	Enclosures, Dust Suppression, and Dust Collection Device	7.3
Fly Ash Handling Equipment	Pneumatic Transfer System, Silos w/ Bin Vents, and Loadout Operation	Enclosures	7.4
Auxiliary Boiler BLR3	Natural Gas-Fired Boiler	None	7.5
Tank TK2	Gasoline Storage Tank	None	7.6
Dry Sorbent Handling Facility	Sorbent Material (such as Trona or sodium bicarbonate) Processing and Handling Equipment	Filters, Enclosures and Covers	7.7
Note: The information and descriptions contained in this table are for informational purposes only and imply no limits or constraints.			

* Reference to the Unit Specific Conditions in Section 7 or Insignificant Activities in Section 3 of this permit.

Section 5.0 - Overall Source Conditions

5.0 OVERALL SOURCE CONDITIONS

5.1 Applicability of Clean Air Act Permit Program (CAAPP)

- 5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of SO₂, CO, NO_x, VOM, PM, and HAP emissions.
- 5.1.2 This permit is issued based on the source requiring a CAAPP permit as an "affected source" for the purposes of Acid Deposition Control, Title IV of the Clean Air Act.
- 5.1.3 The source is considered a single source with Pawnee Transloading Company, Inc., I.D. No. 021814AAF, located at Route 104, 3 miles east of Pawnee, IL.

5.2 Applicable Regulations

- 5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.
- 5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability. Appropriate compliance procedures addressing these regulations are set forth for specific emission units in Section 7 of this permit:
 - a. i. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith (i.e., overhead) at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
 - ii. The Permittee shall conduct observations at the property line of the source for visible emissions of fugitive particulate matter from the source to address compliance with 35 IAC 212.301, upon request by the Illinois EPA, as follows: For this purpose, daily observations shall be conducted for a week for particular area(s) of concern at the source, as specified in the request. Observations shall begin either within one day or three days of receipt of a written request from the Illinois EPA, depending, respectively, upon whether observations will be conducted by employees of the Permittee or a third-party observer hired

Section 5.0 - Overall Source Conditions

by the Permittee to conduct observations on its behalf. The Permittee shall keep records for these observations, including identity of the observer, the date and time of observations, the location(s) from which observations were made, and duration of any fugitive emissions event(s).

- b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) or 212.124.

5.2.3 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, including the following:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be appropriately certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.4 Risk Management Plan (RMP)

- a. This stationary source, as defined in 40 CFR 68.3, is subject to 40 CFR Part 68, the federal regulations for Chemical Accident Prevention. This condition is imposed in this permit pursuant to 40 CFR 68.215(a)(1).
- b. The Permittee shall revise and update the RMP submitted pursuant to 40 CFR 68.150, as specified in 40 CFR 68.190.

5.2.5 Future Emission Standards

Section 5.0 - Overall Source Conditions

- a. Should this source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC Subtitle B after the date issued of this permit, the Permittee shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance or otherwise demonstrate initial compliance as provided by such regulation. Following the submittal of such a compliance certification or initial compliance demonstration, the Permittee shall address the applicable requirements of such regulation as part of the annual compliance certification required by Condition 9.8.

Note: This permit may also have to be revised or reopened to address such newly applicable regulations, as provided by Section 39.5(15)(a) of the Act. (See Condition 9.12.2.)

- b. This permit and the terms and conditions herein do not affect the Permittee's past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA. Further, neither the issuance of this permit nor any of the terms or conditions of the permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.

5.2.6 Episode Action Plan

- a. Pursuant to 35 IAC 244.141, the Permittee shall have on file with the Illinois EPA an approved Episode Action Plan for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The Episode Action Plan shall contain the information specified in 35 IAC 244.144.
- b. Pursuant to 415 ILCS 5/39.5(7)(a), the Episode Action Plan, as submitted by the Permittee on November 16, 2015, is incorporated herein by reference. Any revision to the plan submitted to Illinois EPA while this permit is in effect is automatically incorporated by reference, provided the revision is not expressly disapproved, in writing, by the Illinois EPA within 30 days of receipt of the revision. Upon such automatic incorporation, the revised plan replaces the version of the plan previously incorporated by reference.

Section 5.0 - Overall Source Conditions

- c. The plan incorporated by reference into this permit constitutes the approved Episode Action Plan required by 35 IAC 244.141, addressing the actions that will be implemented to reduce SO₂, PM₁₀, NO₂, CO and VOM emissions from various emissions units at the source in the event of a yellow alert, red alert or emergency issued under 35 IAC 244.161 through 244.165.
- d. Pursuant to 35 IAC 244.169, or as may otherwise be required under 35 IAC 244, Appendix D, the Permittee shall immediately implement the appropriate steps described in the approved Episode Action Plan upon receiving notice from the Illinois EPA.
- e. Pursuant to 35 IAC 244.143(d), if an operational change occurs at the source which invalidates the approved Episode Action Plan, a revised Episode Action Plan shall be submitted to the Illinois EPA for review and approval within 30 days of the change.
- f. Pursuant to Section 35 IAC 244.145(b), in the event that the Illinois EPA notifies the Permittee of a deficiency with any Episode Action Plan submitted pursuant to 35 IAC Part 244, the Permittee shall be required to revise and resubmit the Episode Action Plan within 30 days of receipt of notification to address the deficiency.
- g. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall keep a copy of the approved Episode Action Plan along with a record of activities completed according to the Episode Action Plan.

5.2.7 Control Measures Record

- a.
 - i. The Control Measures Record, as submitted by the Permittee on June 12, 2017, is incorporated herein by reference and constitutes the Control Measures Record required by Conditions 7.2.9(b), 7.3.9(b), and 7.4.9(b).
 - ii. Any revised version of the Control Measures Record prepared by the Permittee and submitted to Illinois EPA while this permit term is in effect is automatically incorporated by reference into this permit, except as provided in 5.2.7(a)(iii). Upon such automatic

Section 5.0 - Overall Source Conditions

incorporation, the revised plan replaces the version of the plan previously incorporated by reference.

- iii. For any revisions to the Control Measures Record that relate to Active Coal Pile 1 (A Coal Pile)-wind erosion, Active Coal Pile 2 (B Coal Pile)-wind erosion, Inactive Coal Pile (C Coal Pile)-wind erosion, Radial Boom Stacker, Dry Fly Ash Loadout System #1 Ash Silo or Dry Fly Ash System #2 Ash Silo, the Permittee shall submit an appropriate permit application to incorporate by reference such revisions into the permit.
- iv. In the event that within 30 days of receipt of a revised Control Measures Record the Illinois EPA notifies the Permittee in writing of any deficiency with the revision, then, within 30 days of such notice, the Permittee shall respond with relevant additional information or a further revision to the Control Measures Record.
- b. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep a copy of the Control Measures Record and any amendments or revisions to the Control Measures Record (as required by Conditions 7.2.9, 7.3.9, and 7.4.9).

5.3 Intentionally Blank.

5.4 Intentionally Blank.

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source for purposes of "Duties to Pay Fees" of Condition 9.4, not considering insignificant activities as addressed by Section 3, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units on a calendar year basis. The Permittee shall maintain records with supporting calculations of how the annual emissions for fee purposes were calculated. This condition is set solely for the purpose of establishing fees and is not enforceable as a restriction or limit on emissions for any purpose other than the permitted CAAPP fee. Section 39.5(18) of the Act. (State-Only Requirement).

Section 5.0 - Overall Source Conditions

Pollutant		Tons/Year
Volatile Organic Material	(VOM)	207
Sulfur Dioxide	(SO ₂)	3,003
Particulate Matter	(PM)	161
Nitrogen Oxides	(NO _x)	2,037
HAP, not included in VOM or PM	(HAP)	46
Total		5,454

5.6 General Recordkeeping Requirements

5.6.1 Records for Emissions

The Permittee shall maintain records for the source to prepare its Annual Emission Report pursuant to 35 IAC 254.134.

5.6.2 Retention and Availability of Records

The Permittee shall comply with the following requirements with respect to retention and availability of records pursuant to Sections 4(b) and 39.5(7)(a), (b), (e)(ii), (o)(v), and p(ii)(A) and (B) of the Act.

- a. All records required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be readily accessible to the Permittee, the Illinois EPA and USEPA, and made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. In response to an Illinois EPA or USEPA request made during the course of an inspection of the source, the Permittee shall retrieve and provide paper copies, or as electronic media, any records required by this permit that are retained in an electronic format (e.g., computer). Such response shall be provided at the time of the inspection; however, if the Permittee believes that the volume and nature of the requested material would make this overly burdensome, material shall be provided no later than 10 days thereafter unless a later date is agreed upon by the Permittee, Illinois EPA, and/or the USEPA.
- c. Upon written request by the Illinois EPA for copies of records or reports required to be kept by this permit, the Permittee shall promptly submit a copy of such material to the Illinois EPA. For this

Section 5.0 - Overall Source Conditions

purpose, material shall be submitted to the Illinois EPA within 30 days unless additional time is provided by the Illinois EPA or the Permittee believes that the volume and nature of requested material would make this overly burdensome, in which case, the Permittee shall respond within 30 days with the explanation and a schedule for submittal of the requested material. (See also Condition 9.12.4.)

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

- a. For emissions units that are addressed by the unit-specific conditions of this permit, the timing for reporting of deviations shall be in accordance with such conditions.
- b.
 - i. For other emissions units and activities at the source, the timing for reporting of deviations shall be in accordance with the provisions of relevant regulations if such provisions address timing of deviation reports.
 - ii. Otherwise, if the relevant regulations do not address timing of deviation reports, deviation reports shall be submitted within 30 days.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year, as specified by 35 IAC Part 254 [Sections 4(b) and 39.5(7)(a), (b) and (f) of the Act].

Section 6.0 - Conditions for Emissions Control Programs
6.1 Intentionally Blank.

6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS

6.1 Intentionally Blank.

Section 6.0 - Conditions for Emissions Control Programs
6.2 - Acid Rain Program Permit

6.2 Acid Rain Program

6.2.1 Applicability

Under Title IV of the CAA, Acid Deposition Control, this source is an affected source and the following emission units at the source are affected units for acid deposition:

Boiler 1 (BLR-1) and 2 (BLR-2)

Note: Title IV of the CAA, and regulations promulgated thereunder, establish requirements for affected sources related to control of emissions of pollutants that contribute to acid rain. For purposes of this permit, these requirements are referred to as Title IV provisions.

6.2.2 Applicable Emission Requirements

The owners and operators shall not violate applicable Title IV provisions. In particular, NO_x emissions of affected units shall not exceed the limit set by 40 CFR Part 76 as allowed by an Acid Rain Permit. SO₂ emissions of the affected units shall not exceed any allowances that the source lawfully holds under Title IV provisions [Section 39.5(7)(g) and (17)(1) of the Act].

Note: Affected sources must hold SO₂ allowances to account for the SO₂ emissions from affected units at the source that are subject to Title IV provisions. Each allowance is a limited authorization to emit up to one ton of SO₂ emissions during or after a specified calendar year. The possession of allowances does not authorize exceedances of applicable emission standards or violations of ambient air quality standards.

6.2.3 Monitoring, Recordkeeping and Reporting

The owners and operators shall comply with applicable requirements for monitoring, recordkeeping and reporting specified by Title IV provisions, including 40 CFR Part 75 [Sections 39.5(7)(b) and 39.5(17)(m) of the Act].

Note: As further addressed by Section 7 of this permit, the following emission determination methods are currently being used for the affected units at this source.

NO_x: Continuous Emissions Monitoring (40 CFR 75.12)
SO₂: Continuous Emissions Monitoring (40 CFR 75.11)

Section 6.0 - Conditions for Emissions Control Programs
6.2 - Acid Rain Program Permit

Opacity: Continuous Opacity Monitoring (40 CFR 75.14)

6.2.4 Acid Rain Permit

The owners and operators shall comply with the terms and conditions of the source's Acid Rain permit [Section 39.5(17)(1) of the Act].

Note: The source is subject to an Acid Rain permit, which was issued pursuant to Title IV provisions, including Section 39.5(17) of the Act. Affected sources must be operated in compliance with their Acid Rain permits. This source's Acid Rain permit is incorporated by reference into this permit and a copy of the current Acid Rain permit is included as Attachment 5 of this permit. Revisions and modifications of this Acid Rain permit, including administrative amendments and automatic amendments (pursuant to Sections 408(b) and 403(d) of the CAA or regulations thereunder) are governed by Title IV provisions, as provided by Section 39.5(13)(e) of the Act. Accordingly, revision or renewal of the Acid Rain permit may be handled separately from this CAAPP permit and a copy of the new Acid Rain permit may be included in this permit by administrative amendment.

6.2.5 Coordination with Other Requirements

- a. This permit does not contain any conditions that are intended to interfere with or modify the requirements of Title IV provisions (Section 39.5(17)(h) of the Act). In particular, this permit does not restrict the flexibility under Title IV provisions of the owners and operators of this source to amend their Acid Rain compliance plan [Section 39.5(13)(e) of the Act].
- b. Where another applicable requirement of the CAA is more stringent than an applicable requirement of Title IV provisions, both requirements are incorporated into this permit and are enforceable and the owners and operators shall comply with both requirements [Section 39.5(7)(h) of the Act].

Section 6.0 - Conditions for Emissions Control Programs
6.3 - Cross-State Air Pollution Rule (CSAPR)

6.3 Cross-State Air Pollution Rule (CSAPR)/Transport Rule (TR)
Trading Programs

6.3.1 Applicability

The USEPA issued the Cross State Air Pollution Rule (CSAPR)*, also known as the Transport Rule (TR) in July 2011 to address CAA requirements concerning interstate transport of air pollution and to replace the previous Clean Air Interstate Rule (CAIR). For purposes of CSAPR, this source is a "TR NO_x Annual source," "TR NO_x Ozone Season source," and "TR SO₂ Group 1 source." This following emission units at this source are "TR NO_x Annual units," "TR NO_x Ozone Season units" and "TR SO₂ Group 1 units":

Boiler BLR-1
Boiler BLR-2

* Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals, 76 FR 48208 (August 8, 2011); Federal Implementation Plans for Iowa, Michigan, Missouri, Oklahoma, and Wisconsin and Determination for Kansas Regarding Interstate Transport of Ozone, 76 FR 80760 (December 27, 2011); Revisions to Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone, 77 FR 10324 (February 21, 2012); Revisions to Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone, 77 FR 34830 (June 12, 2012).

6.3.2 Applicable Emission Requirements

a. TR NO_x Annual Emissions Requirements

i. Pursuant to 40 CFR 97.406(c)(1), beginning January 1, 2015,

A. As of the allowance transfer deadline for a control period in a given year, the owner and operator shall hold, in the source's compliance account, TR NO_x Annual allowances available for deduction for such control period under 40 CFR 97.424(a) and 97.406(c)(3) in an amount not less than the tons of total NO_x emissions for such control period from Boiler BLR-1 and Boiler BLR-2.

Section 6.0 - Conditions for Emissions Control Programs
6.3 - Cross-State Air Pollution Rule (CSAPR)

- B. If total NO_x emissions during a control period in a given year from the TR NO_x Annual units at a TR NO_x Annual source are in excess of the TR NO_x Annual emissions limitation set forth in paragraph (a)(i)(A) above, then:
 - I. The owner and operator and each TR NO_x Annual unit at the source shall hold the TR NO_x Annual allowances required for deduction under 40 CFR 97.424(d); and
 - II. The owner and operator and each TR NO_x Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act.
- ii. Beginning January 1, 2017, if total NO_x emissions during a control period in a given year from all TR NO_x Annual units at TR NO_x Annual sources in Illinois exceed the Illinois assurance level, the owner and operator shall comply with the provisions of 40 CFR 97.406(c)(2).
- iii. Compliance periods.
 - A. A TR NO_x Annual unit shall be subject to the requirements under Condition 6.3.2(a)(i) for the control period starting on January 1, 2015, and for each control period thereafter [40 CFR 97.406(c)(3)(i)].
 - B. A TR NO_x Annual unit shall be subject to the requirements under Condition 6.3.2(a)(ii) above for the control period starting on January 1, 2017, and for each control period thereafter [40 CFR 97.406(c)(3)(ii)].
- iv. Vintage of allowances held for compliance.

Section 6.0 - Conditions for Emissions Control Programs
6.3 - Cross-State Air Pollution Rule (CSAPR)

- A. A TR NO_x Annual allowance held for compliance with the requirements under Condition 6.3.2(a)(i)(A) for a control period in a given year must be a TR NO_x Annual allowance that was allocated for such control period or a control period in a prior year [40 CFR 97.406(c)(4)(i)].
- B. A TR NO_x Annual allowance held for compliance with the requirements under Conditions 6.3.2(a)(i)(B) or 6.3.2(a)(ii) for a control period in a given year must be a TR NO_x Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year [40 CFR 97.406(c)(4)(ii)].
- v. Allowance Management System requirements. Each TR NO_x Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart AAAAA [40 CFR 97.406(c)(5)].
- vi. Limited authorization. A TR NO_x Annual allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:
 - A. Such authorization shall only be used in accordance with the TR NO_x Annual Trading Program [40 CFR 97.406(c)(6)].
- b. TR NO_x Ozone Season Emissions Requirements
 - i. Pursuant to 40 CFR 97.506(c)(1), beginning May 1, 2015,
 - A. As of the allowance transfer deadline for a control period in a given year, the owner and operator shall hold, in the source's compliance account, TR NO_x Ozone Season allowances available for deduction for such control period under 40 CFR 97.524(a) and 97.506(c)(3) in an amount not less than the tons of total NO_x emissions for such control period from Boiler BLR-1 and Boiler BLR-2.

Section 6.0 - Conditions for Emissions Control Programs
6.3 - Cross-State Air Pollution Rule (CSAPR)

- B. If total NO_x emissions during a control period in a given year from the TR NO_x Ozone Season units at a TR NO_x Ozone Season source are in excess of the TR NO_x Ozone Season emissions limitation set forth in Condition 6.3.2(b)(i)(A) above, then:
 - I. The owner and operator and each TR NO_x Ozone Season unit at the source shall hold the TR NO_x Annual allowances required for deduction under 40 CFR 97.524(d); and
 - II. The owner and operator and each TR NO_x Ozone Season unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart BBBB and the Clean Air Act.
- ii. Beginning May 1, 2017, if total NO_x emissions during a control period in a given year from all TR NO_x Ozone Season units at TR NO_x Ozone Season sources in Illinois exceed the Illinois assurance level, the owner and operator shall comply with the provisions of 40 CFR 97.506(c)(2).
- iii. Compliance periods.
 - A. A TR NO_x Ozone Season unit shall be subject to the requirements under Condition 6.3.2(b)(i) for the control period starting on May 1, 2015, and for each control period thereafter [40 CFR 97.506(c)(3)(i)].
 - B. A TR NO_x Ozone Season unit shall be subject to the requirements under Condition 6.3.2(b)(ii) above for the control period starting on May 1, 2017, and for each control period thereafter [40 CFR 97.506(c)(3)(ii)].

Section 6.0 - Conditions for Emissions Control Programs
6.3 - Cross-State Air Pollution Rule (CSAPR)

- iv. Vintage of allowances held for compliance.
 - A. A TR NO_x Ozone Season allowance held for compliance with the requirements under Condition 6.3.2(b)(i)(A) for a control period in a given year must be a TR NO_x Annual allowance that was allocated for such control period or a control period in a prior year [40 CFR 97.506(c)(4)(i)].
 - B. A TR NO_x Ozone Season allowance held for compliance with the requirements under Conditions 6.3.2(b)(i)(B) or 6.3.2(b)(ii) for a control period in a given year must be a TR NO_x Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year [40 CFR 97.506(c)(4)(ii)].
- v. Allowance Management System requirements. Each TR NO_x Ozone Season allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart BBBBB [40 CFR 97.506(c)(5)].
- vi. Limited authorization. A TR NO_x Ozone Season allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:
 - A. Such authorization shall only be used in accordance with the TR NO_x Ozone Season Trading Program [40 CFR 97.506(c)(6)].
- c. TR SO₂ Emissions Requirements
 - i. Pursuant to 40 CFR 97.606(c)(1), beginning January 1, 2015,
 - A. As of the allowance transfer deadline for a control period in a given year, the owner and operator shall hold, in the source's compliance account, TR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) and 97.606(c)(3) in an amount not less than the tons of total SO₂

Section 6.0 - Conditions for Emissions Control Programs
6.3 - Cross-State Air Pollution Rule (CSAPR)

emissions for such control period from
Boiler BLR-1 and Boiler BLR-2.

- B. If total SO₂ emissions during a control period in a given year from the TR SO₂ Group 1 units at a TR SO₂ Group 1 source are in excess of the TR SO₂ Group 1 emissions limitation set forth in paragraph (c)(i)(A) above, then:
 - I. The owner and operator and each TR SO₂ Group 1 unit at the source shall hold the TR SO₂ Group 1 allowances required for deduction under 40 CFR 97.624(d); and
 - II. The owner and operator and each TR SO₂ Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart CCCCC and the Clean Air Act.
- ii. Beginning January 1, 2017, if total SO₂ emissions during a control period in a given year from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in Illinois exceed the Illinois assurance level, the owner and operator shall comply with the provisions of 40 CFR 97.606(c)(2).
- iii. Compliance periods.
 - A. A TR SO₂ Group 1 unit shall be subject to the requirements under Condition 6.3.2(c)(i) for the control period starting on January 1, 2015, and for each control period thereafter [40 CFR 97.606(c)(3)(i)].
 - B. A TR SO₂ Group 1 unit shall be subject to the requirements under Condition 6.3.2(c)(ii) above for the control period starting on January 1, 2017, and for each

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control period thereafter [40 CFR
97.606(c)(3)(ii)].

iv. Vintage of allowances held for compliance.

A. A TR SO₂ Group 1 allowance held for compliance with the requirements under Condition 6.3.2(c)(i)(A) for a control period in a given year must be a TR SO₂ Group 1 allowance that was allocated for such control period or a control period in a prior year [40 CFR 97.606(c)(4)(i)].

B. A TR SO₂ Group 1 allowance held for compliance with the requirements under Conditions 6.3.2(c)(i)(B) or 6.3.2(c)(ii) for a control period in a given year must be a TR SO₂ Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year [40 CFR 97.606(c)(4)(ii)].

v. Allowance Management System requirements. Each TR SO₂ Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart CCCCC [40 CFR 97.606(c)(5)].

vi. Limited authorization. A TR SO₂ Group 1 allowance is a limited authorization to emit one ton of SO₂ during the control period in one year. Such authorization is limited in its use and duration as follows:

A. Such authorization shall only be used in accordance with the TR SO₂ Group 1 Trading Program [40 CFR 97.606(c)(6)].

6.3.3 Monitoring, Recordkeeping, and Reporting

- a. The owner or operator must submit to the USEPA Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable [40 CFR 97.434(b), 97.534(b) and 97.634(b)].
- b. For TR NO_x Annual emissions, the owner or operator shall comply with the continuous monitoring,

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recordkeeping, and reporting provisions specified in 40 CFR Part 97 Subpart AAAAA, and 40 CFR Part 75 Subpart H. These provisions include the calculation requirements specified at 40 CFR 97.406(b)(2); the recordkeeping and reporting requirements specified at 40 CFR 97.406(e); the general monitoring, recordkeeping, and reporting requirements specified at 40 CFR 97.430; the monitoring system certification and recertification requirements specified at 40 CFR 97.431; the monitoring system out-of-control requirements specified at 40 CFR 97.432; the notification requirements specified at 40 CFR 97.433; the recordkeeping and reporting requirements specified at 40 CFR 97.434; and the petitions for alternatives to monitoring, recordkeeping, or reporting requirements specified at 40 CFR 75.66 and 97.435.

- c. For TR NO_x Ozone Season emissions, the owner or operator shall comply with the continuous monitoring, recordkeeping, and reporting provisions specified in 40 CFR Part 97 Subpart BBBBB, and 40 CFR Part 75 Subpart H. These provisions include the calculation requirements specified at 40 CFR 97.506(b)(2); the recordkeeping and reporting requirements specified at 40 CFR 97.506(e); the general monitoring, recordkeeping, and reporting requirements specified at 40 CFR 97.530; the monitoring system certification and recertification requirements specified at 40 CFR 97.531; the monitoring system out-of-control requirements specified at 40 CFR 97.532; the notification requirements specified at 40 CFR 97.533; the recordkeeping and reporting requirements specified at 40 CFR 97.534; and the petitions for alternatives to monitoring, recordkeeping, or reporting requirements specified at 40 CFR 75.66 and 97.535.
- d. For TR SO₂ Group 1 emissions, the owner or operator shall comply with the continuous monitoring, recordkeeping, and reporting provisions specified in 40 CFR Part 97 Subpart CCCCC, and 40 CFR Part 75 Subparts B, F and G. These provisions include the calculation requirements specified at 40 CFR 97.606(b)(2); the recordkeeping and reporting requirements specified at 40 CFR 97.606(e); the general monitoring, recordkeeping, and reporting requirements specified at 40 CFR 97.630; the monitoring system certification and recertification requirements specified at 40 CFR 97.631; the monitoring system out-of-control requirements

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specified at 40 CFR 97.632; the notification requirements specified at 40 CFR 97.633; the recordkeeping and reporting requirements specified at 40 CFR 97.634; and the petitions for alternatives to monitoring, recordkeeping, or reporting requirements specified at 40 CFR 75.66 and 97.635.

6.3.4 Designated Representative and Alternate Designated Representative

Pursuant to 40 CFR 97.406(a), 40 CFR 97.506(a), and 40 CFR 97.606(a), the owners and operators shall comply with the requirement to have a Designated Representative, and may also have an Alternate Designated Representative for Boiler BLR-1 and Boiler BLR-2, in accordance with 40 CFR 97.413 through 418 for the TR NO_x Annual Trading Program; 40 CFR 97.513 through 518 for the TR NO_x Ozone Season Trading Program; and 40 CFR 97.613 through 618 for the TR SO₂ Group 1 Trading Program.

6.3.5 Coordination with Other Requirements

- a. Any provision of the TR NO_x Annual or Ozone Season or TR SO₂ Group 1 Trading Program that applies to a source or the designated representative shall also apply to the owners and operators of such source and the TR NO_x Annual or Ozone Season or TR SO₂ Group 1 units at the source [40 CFR 97.406(f)(1), 97.506(f)(1) and 97.606(f)(1)].
- b. Any provision of the TR NO_x Annual or Ozone Season or TR SO₂ Group 1 Trading Program that applies to a TR NO_x Annual or Ozone Season or TR SO₂ Group 1 unit or the designated representative shall also apply to the owners and operators of such unit [40 CFR 97.406(f)(2), 97.506(f)(2) and 97.606(f)(2)].
- c. This permit does not contain any conditions that are intended to interfere with or modify the requirements of the Transport Rule, 40 CFR Part 97 Subparts AAAAA, BBBBBB or CCCCC.
- d. Where another applicable requirement of the CAA is more stringent than an applicable requirement of 40 CFR Part 97 Subparts AAAAA, BBBBBB, or CCCCC, both requirements are incorporated into this permit and are enforceable and the owners and operators of the source shall comply with both requirements [Section 39.5(7)(h) of the Act].

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- e. No revision of this CAAPP permit is required for any allocation, holding, deduction, or transfer of TR NOx Annual or Ozone Season or TR SO2 Group 1 allowances in accordance with 40 CFR Part 97 Subparts AAAAA, BBBBB, or CCCCC [40 CFR 97.406(d)(1), 97.506(d)(1) and 97.606(d)(1)].

6.3.6 Effect on Other Authorities

No provision of the TR NOx Annual or Ozone Season or TR SO2 Group 1 Trading Programs or exemption under 40 CFR 97.405, 97.505 or 96.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NOx Annual or Ozone Season or TR SO2 Group 1 source or unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act [40 CFR 97.406(g), 97.506(g) and 97.606(g)].

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6.4 - Best Available Retrofit Technology (BART)

6.4 Best Available Retrofit Technology (BART)

6.4.1 Description

- a. Pursuant to Section 169A of the Clean Air Act, USEPA has determined that as Part of its strategy to reduce visibility impairing air pollutants, such as oxides of nitrogen (NO_x), sulfur dioxide (SO₂), and particulate matter (PM), that certain stationary emission sources should be subject to a Best Available Retrofit Technology (BART) standard. BART is defined as an "emission limitation based on the degree of reduction available through the application of the best system of continuous emission reduction for each pollutant which is emitted by an existing stationary facility" (40 CFR 51.301).
- b. The sources subject to a BART standard, according to "Guidelines for BART Determinations under the Regional Haze Rule" ("BART Guidelines") published by USEPA in July of 2005, must be one of 26 specified source categories; were in existence in August 1977; began operating after August 1962; and have the potential to emit 250 tons per year or more of any air pollutant.
- c. For coal-fired EGUs, the BART Guidelines provide presumptive emission limits or control levels for various boiler and coal types. The Illinois EPA has compared these presumptive BART emission levels to existing emission reduction requirements and commitments for the subject-to-BART EGUs in Illinois.

Note: The description in Condition 6.4.1 is for informational purposes only and implies no limits or constraints.

6.4.2 Applicability

This source is an affected source and the following emission units at the source are affected units for BART:

Boiler 1 (BLR-1), and
Boiler 2 (BLR-2)

6.4.3 BART Controls for EGUs/Emission Standards

Construction Permit 09050022 was issued on June 24, 2011 for an emission control program (Program) for the affected

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units (i.e., Kincaid Units 1 and 2, the two electrical generating units at the Kincaid Power Station) that addresses the role of their emissions in visibility impairment and regional haze, as is required for the affected units by the federal Clean Air Act, Section 169A, Visibility Protection for Federal Class I Areas. Under the Program, the Permittee is reducing emissions of nitrogen oxides (NO_x) from the affected units by operating the existing SCR systems on the units on a year-round basis. The Permittee is reducing emissions of sulfur dioxide (SO₂) from the affected units by operating flue gas desulfurization technology on the units. The affected units are subject to stringent annual limits for their NO_x and SO₂ emission rates, which limits represent application of Best Available Retrofit Technology (BART) to the units.

6.4.4 NO_x and SO₂ Emission Reduction Requirements

Pursuant to Construction Permit 09050022,

a. NO_x Emission Reduction Requirements

Commencing March 1, 2013 and continuing thereafter, the annual average NO_x emission rate of the affected units, combined, shall not exceed 0.07 pounds per million British thermal units (mmBtu). This limit shall apply on a calendar year basis (i.e., for the period from January 1st to December 31st of each year). [T1]

b. SO₂ Emission Reduction Requirements

i. In the years 2014, 2015 and 2016, the annual average SO₂ emission rate of the affected units, combined, on a calendar year basis, shall not exceed 0.20 pounds per million Btu. [T1]

ii. Commencing January 1, 2017 and continuing thereafter, the annual average SO₂ emission rate of the affected units, combined, on a calendar year basis, shall not exceed 0.15 pounds per million Btu. [T1]

c. Compliance Methodology

i. Compliance with the limits in Conditions 6.4.4(a) and (b) shall be determined by dividing the total amount of NO_x or SO₂ emitted by the affected units during the particular compliance period, in pounds, by the fuel heat input into the affected units during the

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period, in million Btu, using data for the emissions and heat input collected under the federal Cross-State Air Pollution Rule (CSAPR) (or any subsequent federal program addressing NO_x and SO₂ emissions of electrical generating units that is a successor to CSAPR). [T1]

- ii. The applicable requirements for monitoring SO₂ and NO_x emissions of the affected boilers under the CSAPR, which is to be used to determine compliance with the limits in Conditions 6.4.4(a) and (b), are set forth in Section 6.3.3 of this permit.
- iii. NO_x and SO₂ allowances under CSAPR or any successor program shall not be considered in determining compliance with these limits, provided however that the transfer of such allowances associated with the affected units is not restricted by this permit and nothing in this permit shall be considered to prohibit or restrict the ability of the Permittee to sell, trade or transfer SO₂ or NO_x allowances of any vintage owned, allocated to or earned by the affected units. [T1]

6.4.5 Reporting Requirements Under the Program

For the annual period beginning on January 1, 2017 and continuing thereafter, the Permittee shall submit annual compliance reports to the Illinois EPA that provide the annual NO_x and SO₂ emission rates of the affected units, with supporting documentation, and address compliance with the emission limits in Conditions 6.4.4(a) and (b). These compliance reports shall be submitted by January 31 of the year following the year or period addressed by the report. [T1]

Section 6.0 - Conditions for Emissions Control Programs
6.5 - Control of Mercury Emissions from Coal-Fired Electric Generating Units

6.5 Control of Mercury Emissions from Coal-fired Electric Generating Units

6.5.1 Description

The purpose of 35 IAC Part 225 Subpart B is to limit the emissions of mercury from coal-fired EGUs operating in Illinois. Compliance with mercury emission limits is demonstrated using a continuous monitoring system.

Note: The description in Condition 6.5.1 is for informational purposes only and implies no limits or constraints.

6.5.2 List of Emission Units

The EGUs associated with the following emission units at the source are affected EGUs for the purpose of 35 IAC Part 225 Subpart B:

Boiler 1 (BLR-1), and
Boiler 2 (BLR-2)

6.5.3 Applicability

Both affected EGUs are subject to 35 IAC 225 Subpart B, pursuant to 35 IAC 225.205, as neither is a cogeneration unit and each is a unit serving, at any time since the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale.

6.5.4 Emission Standards for EGUs

- a. Pursuant to 35 IAC 225.233(d)(1), the Permittee shall comply with one of the following standards for the affected EGUs, calculated in accordance with 35 IAC 225.230(a) or (d), on a rolling 12-month basis (State-Only Requirement):
 - i. An emission standard of 0.0080 lb mercury/GWh gross electrical output, provided that the Permittee monitors and records gross electrical output in accordance with 35 IAC 225.263 and 35 IAC 225.290(a)(2)(B); or
 - ii. A minimum 90-percent reduction of input mercury, provided that the Permittee conducts the necessary fuel sampling, analysis and recordkeeping in accordance with 35 IAC 225.265.

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6.5 - Control of Mercury Emissions from Coal-Fired Electric Generating Units

6.5.5 Monitoring

The Permittee shall install, operate and maintain monitoring systems required pursuant to 35 IAC 225.240 through 225.270 for monitoring mercury mass emissions (including the systems required to monitor mercury concentration, stack gas moisture content, stack gas flow rate, and CO₂ or O₂ concentration, as applicable, in accordance with Sections 1.15 or 1.16 of 35 IAC 225. Appendix B) (State-Only Requirement).

6.5.6 Recordkeeping

- a. Pursuant to 35 IAC 225.290(a)(2), the Permittee shall maintain records for each month identifying the mercury emission standard in Condition 6.5.4(a) used to demonstrate compliance or that is applicable for the affected EGU and the records, as specified in 35 IAC 225.290(a)(2). (State-Only Requirement).
- b. The Permittee shall maintain records of the following data (State-Only Requirement):
 - i. Monthly emissions of mercury from each affected EGU.
 - ii. For an affected EGU complying by means of 35 IAC 225.230(d), records of the monthly allowable emissions of mercury from the EGU.
- c. The Permittee shall maintain records related to quality assurance activities conducted for emissions monitoring systems pursuant to Section 2.2 of 35 IAC 225. Exhibit B. (State-Only Requirement).
- d. The Permittee shall prepare and maintain a Mercury Emissions Monitoring Plan as specified in Section 1.10 of 35 IAC Part 225. Appendix B. (State-Only Requirement).

6.5.7 Reporting

- a. Quarterly Reports. For any affected EGUs using CEMS or excepted monitoring systems at any time during a calendar quarter, the Permittee shall submit quarterly reports and compliance certifications to the Illinois EPA as required by 35 IAC 225.290(b) and (c) (State-Only Requirement).

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6.5 - Control of Mercury Emissions from Coal-Fired Electric Generating Units

- b. Annual Certification of Compliance. The Permittee shall submit to the Agency an Annual Certification of Compliance with 35 IAC Part 225 Subpart B no later than May 1 of each year, addressing compliance for the previous calendar year, as required by 35 IAC 225.290(d) (State-Only Requirement).
- c. Deviation Reports. For each affected EGU, the Permittee shall promptly notify the Agency of deviations from requirements of 35 IAC Part 225 Subpart B, as required by 35 IAC 225.290(e). These notifications must include a description of such deviations within 30 days after discovery of the deviations, and a discussion of the possible cause of such deviations, any corrective actions, and any preventative measures taken (State-Only Requirement).
- d. Quality Assurance RATA Reports. The Permittee shall submit to the Agency, Air Compliance and Enforcement Section, the quality assurance RATA report for each EGU or group of EGUs pursuant to Section 1.18(d)(4) of 35 IAC Part 225.Appendix B, within 45 days after completing a quality assurance RATA (State-Only Requirement).

6.5.8 Compliance Procedures

- a. Compliance with the mercury emission limits of Condition 6.5.4(a) is addressed by the monitoring in accordance with Condition 6.5.5(a) and the recordkeeping required by Condition 6.5.6(a) through (d). (State-Only Requirement).

Section 6.0 - Conditions for Emissions Control Programs
6.6 - Mercury and Air Toxics Standard (MATS)

6.6 Mercury and Air Toxics Standard (MATS) (40 CFR Part 63, Subpart UUUUU)

6.6.1 Description

On December 16, 2011, the United States Environmental Protection Agency (USEPA) signed a rule to limit emissions of hazardous air pollutants from power plants. Specifically, these mercury and air toxics standards (MATS) for power plants limit emissions from new and existing coal and oil-fired electric utility steam generating units (EGUs).

The rule establishes numeric emission standards for non-mercury HAP metals, mercury, and non-organic acid gases. It also establishes surrogate emission standards, including SO₂ (as a surrogate for non-organic acid gases), and filterable PM (as a surrogate for non-mercury HAP metals).

The standards set work practices for emissions of organic HAPs, including dioxin/furan. The work practice standards require periodic tune-ups for each unit that involves inspection, adjustment, and/or maintenance and repairs (if necessary) to ensure efficient combustion.

Note: The description in Condition 6.6.1 is for informational purposes only and implies no limits or constraints.

6.6.2 Applicability Provisions

Certain affected sources, as specified below, are "affected electric utility steam generating units (EGUs)" for the purposes of the National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units, pursuant to 40 CFR 63.9981 and 40 CFR 63.9982(a)(1), because the permittee owns or operates coal fired EGUs as defined at 40 CFR 63.10042. These affected EGUs are subject to the applicable requirements of the NESHAP, 40 CFR Part 63 Subpart UUUUU, and related requirements in the NESHAP General Provisions, 40 CFR Part 63, Subpart A.

Unit 1 (BLR-1)

Unit 2 (BLR-2)

The affected EGUs are in the subcategory of existing EGUs designed for coal with a heating value greater than or equal to 8300 Btu/lb [40 CFR 63.9990].

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6.6 - Mercury and Air Toxics Standard (MATS)

6.6.3 Applicable Requirements

- a. Unless an affected unit complies with the LEE requirements in Condition 6.6.9(b) or alternative requirements in Conditions 6.6.9(c) or (d), the Permittee shall comply with the following applicable requirements:
 - i. For non-mercury HAP metals,
 - A. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, emissions from the affected EGUs shall comply with one of the following limits:
 - I. Emissions of filterable particulate matter shall not exceed, as a 30-boiler operating day rolling average:
 - a. 0.030 lb/mmBtu (mass per heat input); or
 - b. 0.30 lb/MWh (mass per gross output).
 - II. As an alternative to the standard in Condition 6.6.3(a)(i)(A)(I), the Permittee may elect to comply with the standard for individual or total non-mercury HAP metals as set forth in Condition 6.6.9(c).
 - ii. For mercury,
 - A. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, for affected EGUs not using emissions averaging, emissions of mercury from the affected EGUs shall not exceed, as a 30-boiler operating day rolling average:
 - I. 1.2 lb/TBtu (mass per heat input); or
 - II. 0.013 lb/GWh (mass per gross output).
 - B. Pursuant to 40 CFR 63.10009(a)(2), if the Permittee is using emissions averaging for mercury, emissions from the affected

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EGUs shall not exceed, as a 90-group boiler operating day rolling average:

- I. 1.0 lb/TBtu (mass per heat input);
or
- II. 0.011 lb/GWh (mass per gross output).

iii. For acid gases,

A. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, emissions from the affected EGUs shall comply with one of the following limits:

I. Emissions of SO₂ shall not exceed, as a 30-boiler operating day rolling average:

- a. 0.20 lb/mmBtu (mass per heat input); or
- b. 1.5 lb/MWh (mass per gross output).

II. As an alternative to the standard in Condition 6.6.3(a)(iii)(A)(I), the Permittee may elect to comply with the standard for hydrogen chloride as set forth in Condition 6.6.9(d).

B. Pursuant to 40 CFR 63.9991(c)(2), if the Permittee is complying with the SO₂ limit in Condition 6.6.3(a)(iii)(A)(I), the Permittee must, at all times, operate the wet or dry flue gas desulfurization technology and the SO₂ CEMS installed on the affected units consistent with 40 CFR 63.10000(b).

b. The Permittee may use the emissions averaging provisions of 40 CFR 63.10009 and 40 CFR 63.10022 to demonstrate compliance with the emission standards specified in Conditions 6.6.3(a)(i), (ii)(B), and (iii).

c. If the Permittee elects to switch from heat input based limits to gross output based limits (or vice-versa) in Condition 6.6.3(a) or to an alternate

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emission standard or provision in Conditions 6.6.9(c) through (e), the Permittee shall comply with the Notification of Compliance Status requirements in Condition 6.6.9(a).

- d. Pursuant to 40 CFR 63.10000(b), at all times the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
- e. Performance Tune-up Work Practices:

Pursuant to 40 CFR 63.9991(a)(1), and item 1 of Table 3 to Subpart UUUUU of 40 CFR Part 63, the Permittee shall conduct a tune-up of the EGU burner and combustion controls at least every 36 calendar months, or each 48 months if neural network combustion optimization software is employed, as specified at 40 CFR 63.10021(e).

6.6.4 Applicable Monitoring and Testing Requirements

- a. Unless an affected unit complies with the LEE requirements in Condition 6.6.9(b) or alternative requirements in Conditions 6.6.9(c) or (d), the Permittee shall comply with the following applicable requirements:

- i. For non-mercury HAP metals,

Pursuant to 40 CFR 63.10000(c)(1)(iv), in order to demonstrate compliance with the filterable particulate matter emission standard specified in Condition 6.6.3(a)(i)(A), the Permittee shall monitor continuous performance through performance testing repeated quarterly.

- ii. For mercury,

The Permittee shall monitor emissions of mercury from affected EGUs using a mercury continuous emission monitoring system in accordance with 40 CFR 63.10010(g), 40 CFR

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63.10020(a) through (d), and Appendix A to 40 CFR Part 63 Subpart UUUUU.

iii. For Acid Gases,

To demonstrate compliance with the SO₂ emission limit specified in Condition 6.6.3(a)(iii), the Permittee shall operate and maintain an SO₂ CEMS in accordance with the requirements specified at 40 CFR 63.10010(f) and 40 CFR 63.10020(a) through (d).

iv. For Continuous Monitoring Systems,

A. The Permittee shall comply with the provisions of 40 CFR 63.10010(b), (c) and (d), and 40 CFR 63.10020(a) through (d) regarding CO₂ CEMS, stack gas flow rate monitoring, and stack gas moisture content.

B. Pursuant to 40 CFR 63.10007(f), since the Permittee uses a continuous monitoring system to monitor emissions of mercury and SO₂, the Permittee may use the diluent cap and default gross output values as specified at 40 CFR 63.10007(f)(1) and (2) in emission rate calculations during startup and shutdown periods.

6.6.5 General Testing Requirements

a. Pursuant to 63.10021(a), the Permittee shall conduct all performance testing in accordance with the requirements of 40 CFR 63.10007 and item 1 in Table 2, Table 5, and item 4 in Table 7 to Subpart UUUUU of 40 CFR Part 63.

6.6.6 General Recordkeeping Requirements

a. The Permittee shall keep copies of any information and reports submitted to comply with the requirements of 40 CFR Part 63 Subpart UUUUU, and copies of any performance stack tests, CMS performance evaluations, and compliance demonstrations as specified at 40 CFR 63.10032(a).

b. The Permittee shall keep records for any CMS as specified at 40 CFR 63.10032(b) and 40 CFR 63.10(c).

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- c. The Permittee shall keep records of any monitoring data as specified at 40 CFR 63.10032(c) and 63.10(b)(2)(vii) through (ix).
- d. The Permittee shall keep records of any monthly fuel use, non-hazardous secondary materials combusted, and information for affected EGUs qualifying as LEE units as specified at 40 CFR 63.10032(d).
- e. The Permittee shall keep records for any emissions averaging as specified at 40 CFR 63.10032(e).
- f. The Permittee shall keep records regarding any startup or shutdown periods as specified at 40 CFR 63.10032(f) and (i).
- g. The Permittee shall keep records regarding any equipment malfunctions as specified at 40 CFR 63.10032(g) and (h).
- h. The Permittee shall keep records of any maintenance performed on air pollution control and monitoring equipment as specified at 40 CFR 63.10(b)(2)(iii).
- i. The Permittee shall keep records of any continuous monitoring system malfunctions and inoperative periods as specified at 40 CFR 63.10(b)(2)(vi).
- j. The Permittee shall keep records of any periods of monitored excess emissions as specified at 40 CFR 63.10(c)(7) and (8).
- k. The Permittee shall keep mercury continuous monitoring system and other CMS system records as specified in Section 7.1 of Appendix A to 40 CFR Part 63 Subpart UUUUU.
- l. Pursuant to 40 CFR 63.10033 and 40 CFR 63.10(b)(1), the Permittee shall keep any required records on site for at least the first two years, but may be kept off-site after the first two years.

6.6.7 Reporting Requirements

- a. Pursuant to 40 CFR 63.10030(a), the Permittee shall submit the following notifications, as applicable, in accordance with the specified regulatory provision(s):
 - i. Periodic Test Notifications, as specified at 40 CFR 63.7(b), 40 CFR 63.9(e), and 63.10030(d),

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to be submitted at least 30 days before the test is scheduled to begin.

- ii. Continuous Monitoring System Performance Evaluation Notices, as specified at 40 CFR 63.8(e).
 - iii. Alternative Monitoring Requests, as specified at 40 CFR 63.8(f)(4).
 - iv. Alternative RATA Requests, as specified at 40 CFR 63.8(f)(6).
 - v. Special Compliance Requirements Notices, as specified at 40 CFR 63.9(d).
 - vi. Additional CMS Notifications, as specified at 40 CFR 63.9(g).
 - vii. Notifications of Compliance Status, as specified at 40 CFR 63.9(h), 40 CFR 63.10030(e) and Condition 6.6.9(a)(i).
- b. Pursuant to 40 CFR 63.10031(b), the Permittee shall submit a Semiannual Compliance Report no later than January 31 and July 31 of each year. Each Semiannual Compliance Report shall contain the information specified at 40 CFR 63.10031(c) through (d) and (g).
- i. Pursuant to 40 CFR 63.10031(e), the Permittee shall report deviations from the applicable requirements of 40 CFR Part 63 Subpart UUUUU (as defined at 40 CFR 63.10042) in the Semiannual Compliance Report.
- c. Pursuant to 40 CFR 63.10031(f) and 40 CFR 63.10(d)(1) and (2), the Permittee shall submit reports of performance tests and CEMS performance evaluations required by 40 CFR Part 63 Subpart UUUUU no later than 60 days after completion.
- d. The Permittee shall comply with any applicable reporting requirements for mercury CEMS and sorbent trap monitoring systems, as applicable, specified at Sections 7.2.1 through 7.2.4 of Appendix A to 40 CFR Part 63 Subpart UUUUU.
- e. Pursuant to Section 7.2.5 of Appendix A to 40 CFR Part 63 Subpart UUUUU, the Permittee shall submit any required mercury applicable CEMS and sorbent trap monitoring system data quarterly within 30 days after

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the end of each calendar quarter, using the ECMPS Client Tool.

- f. The Permittee shall comply with any applicable reporting requirements for HCl CEMS, if applicable, specified at Sections 11.1 through 11.4 of Appendix B to 40 CFR Part 63 Subpart UUUUU.
- g. Pursuant to Section 11.5 of Appendix B to 40 CFR Part 63 Subpart UUUUU, if applicable, the Permittee shall submit any required HCl CEMS data quarterly within 30 days after the end of each calendar quarter, using the ECMPS Client Tool.

6.6.8 Startup/Shutdown Provisions

- a. Pursuant to 40 CFR 63.9991(a)(1) and 40 CFR 63.10021(h), the Permittee shall comply with the control device operation, fuel usage, monitoring, recordkeeping, and reporting requirements specified in items 3 and 4 of Table 3 to Subpart UUUUU of 40 CFR Part 63 during startup periods and shutdown periods (as those terms are defined at 40 CFR 63.10042) of the affected EGUs.
 - i. The Permittee has elected to use paragraph (1) of the definition of "startup" in 40 CFR 63.10042, and must therefore operate all CMS during startup and use "clean fuels" as defined at 40 CFR 63.10042 for ignition.
 - ii. Pursuant to 40 CFR 63.10030(e)(8)(iii), the Permittee may switch from paragraph (1) of the definition of "startup" in 40 CFR 63.10042 to paragraph (2) of the definition of "startup" (or vice-versa), provided that the Permittee follows the procedure specified at 40 CFR 63.10030(e)(8)(iii)(A) through (E).
 - iii. Pursuant to 40 CFR 63.10030(e)(8)(i), should the Permittee choose to rely on paragraph (2) of the definition of "startup" in 40 CFR 63.10042 for an EGU, the Permittee shall submit a report that identifies EGU and PM control device design characteristics and other information as specified at 40 CFR 63.10030(e)(8)(i)(A) through (K) that shall be prepared, signed, and sealed by a professional engineer licensed in Illinois.

6.6.9 Alternative Requirements

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a. Notification Requirements:

Pursuant to Section 39.5(7)(b) of the Act and 40 CFR 63.10030(e)(8)(iii)(A),

- i. If the Permittee elects to change from compliance with a mass per heat input basis emission limit (e. g., lbs/mmBtu) to a mass per gross output basis emission limit (e. g., lbs/GW-hr), or vice-versa, the Permittee shall comply with the requirements specified at 40 CFR 63.10030(e)(7)(iii)(A) through (C).
- ii. If the Permittee elects to switch from the paragraph (1) definition of startup at 40 CFR 63.10042 to the paragraph (2) definition of startup, or vice-versa, the Permittee shall comply with the requirements specified at 40 CFR 63.10030(e)(8)(iii)(A) through (E).
- iii. If the Permittee elects to change other 40 CFR Part 63 Subpart UUUUU compliance demonstration methods as described by Condition 6.6.9(b) through (e) that renders the compliance demonstration methodology information contained in the most recently-submitted Notification of Compliance Status incorrect, the Permittee shall submit an advance notice to Illinois EPA at least 60 days prior to implementing the change. In the advance notice, the Permittee shall include the information necessary for Illinois EPA to determine the applicable requirements pertaining to the change, and any relevant performance test results necessary to demonstrate compliance with the new method, if applicable. The Permittee shall comply with written directives issued by Illinois EPA in response to such advance notice, and may proceed with implementing the change if not directed otherwise in writing by Illinois EPA within 45 days after submission of the change notice. The Permittee shall also comply with applicable requirements to submit a revised Notification of Compliance Status to Illinois EPA no later than 60 days following the change.

b. Low Emitting EGU (LEE) Alternative Requirements:

- i. LEE Status for mercury (Hg):

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An EGU may qualify for LEE status for Hg if the Permittee collects performance test data that meet the requirements of 40 CFR 63.10005(h), and if those data demonstrate:

- A. For Hg emissions from an existing EGU, either:
 - I. Average emissions less than 10 percent of the applicable Hg emissions limit in Table 2 to 40 CFR Part 63 Subpart UUUUU (expressed either in units of lbs/TBtu or lbs/GWh); or
 - II. Potential Hg mass emissions of 29.0 or fewer pounds per year and compliance with the applicable Hg emission limit in Table 2 to 40 CFR Part 63 Subpart UUUUU (expressed either in units of lbs/TBtu or lbs/GWh).
 - B. If test data demonstrate that an affected EGU qualifies for LEE status for the mercury emission standard specified in Condition 6.6.3(a)(ii) by satisfying the LEE criteria specified at 63.10005(h)(1)(ii), the Permittee shall conduct performance testing as specified at 63.10005(h)(3) at least once every 12 calendar months, as specified at 40 CFR 63.10000(c)(1)(ii).
 - C. Pursuant to 40 CFR 63.10006(b)(2), if subsequent emission test results show that the affected EGU no longer satisfies the criteria for LEE status, the Permittee shall install, certify, operate, and maintain a mercury CEMS or sorbent trap monitoring system in accordance with Appendix A to 40 CFR Part 63 Subpart UUUUU within 6 months of losing LEE eligibility, and conduct quarterly mercury emissions testing until the mercury CEMS or sorbent trap monitoring system is installed, certified, and operating.
- ii. LEE Status for HCl, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals:

An EGU may qualify for LEE status for HCl, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals if the Permittee collects performance test data that meet the

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requirements of 40 CFR 63.10005(h), and if those data demonstrate:

- A. For HCl, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals, performance test emissions results less than 50 percent of the applicable emissions limits in Table 2 to 40 CFR Part 63, Subpart UUUUU for all required testing for 3 consecutive years.
- B. If test data demonstrates that an affected EGU qualifies for LEE status for total non-Hg HAP metals, individual non-Hg HAP metals, filterable particulate matter, or HCl standards specified in Conditions 6.6.9(c)(i)(A)(I), 6.6.9(c)(i)(A)(II), 6.6.3(a)(i), or 6.6.9(d)(i)(A)(I), respectively, by satisfying the LEE criteria specified at 63.10005(h)(1) and (2), the Permittee shall conduct a performance test at least once every 36 calendar months, as specified at 40 CFR 63.10000(c)(1)(iii).
- C. Pursuant to 40 CFR 63.10006(b)(1), if subsequent emission test results show that the affected EGU no longer satisfies the criteria for LEE status, the Permittee shall resume conducting quarterly stack testing for total non-Hg HAP metals, individual non-Hg HAP metals, filterable PM, or HCl or shall install, certify, and operate a PM CEMS, HCl CEMS, SO₂ CEMS, or PM CPMS, as applicable.

c. i. Non-mercury HAP Metals Alternative Requirements:

- A. The Permittee may elect to comply with a non-mercury HAP metals standard as an alternative to the filterable particulate matter standard set forth in Condition 6.6.3(a)(i). Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, for affected EGUs not satisfying the criteria for LEE status, the Permittee may elect to comply with one of the following limits either individually or using the applicable emissions averaging provisions of 40 CFR 63.10009 and 63.10022:
 - I. Emissions of total non-Hg HAP metals from the affected EGUs shall not exceed, as a 30-boiler operating day rolling average, 0.000050 lb/mmBtu (mass per heat input)

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or 0.50 lb/GWh (mass per gross output);
 or

- II. Emissions of individual non-Hg HAP metals (Sb, As, Be, Cd, Cr, Co, Pb, Mn, Ni, Se) shall not exceed, as a 30-boiler operating day rolling average, the following limits specified in Table 2 to Subpart UUUUU of 40 CFR Part 63:

Pollutant:	Emission Limit (Mass Per Heat Input):	OR	Emission Limit (Mass Per Gross Output):
Antimony (Sb)	0.80 lb/TBtu	OR	0.0080 lb/GWh
Arsenic (As)	1.1 lb/TBtu	OR	0.020 lb/GWh
Beryllium (Be)	0.20 lb/TBtu	OR	0.0020 lb/GWh
Cadmium (Cd)	0.30 lb/TBtu	OR	0.0030 lb/GWh
Chromium (Cr)	2.8 lb/TBtu	OR	0.030 lb/GWh
Cobalt (Co)	0.80 lb/TBtu	OR	0.0080 lb/GWh
Lead (Pb)	1.2 lb/TBtu	OR	0.020 lb/GWh
Manganese (Mn)	4.0 lb/TBtu	OR	0.050 lb/GWh
Nickel (Ni)	3.5 lb/TBtu	OR	0.040 lb/GWh
Selenium (Se)	5.0 lb/TBtu	OR	0.060 lb/GWh

ii. Non-mercury HAP Metals Alternative Monitoring Provisions:

- A. If the Permittee elects to demonstrate compliance with the filterable particulate matter emission limit specified in Condition 6.6.3(a)(i) using PM CEMS, the Permittee shall install, certify, operate, and maintain the PM CEMS in accordance with the requirements specified at 40 CFR 63.10010(i) and 40 CFR 63.10020(a) through (d).
- B. If the Permittee elects to demonstrate compliance with the filterable particulate matter emission limit specified in Condition 6.6.3(a)(i) using PM CPMS, the Permittee shall install, certify, operate, and maintain the PM CPMS in accordance with the requirements specified at 40 CFR 63.10010(h) and 40 CFR 63.10020(a) through (d), and Table 6 to 40 CFR Part 63, Subpart UUUUU.

d. i. Acid Gases Alternative Emission Standards:

- A. The Permittee may elect to comply with a standard for emissions of HCl as an

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alternative the SO₂ standards set forth in Condition 6.6.3(a)(iii)(A). Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, for affected EGUs not satisfying the criteria for LEE status, the Permittee may elect to comply with the following limit, either individually or using the applicable emissions averaging provisions of 40 CFR 63.10009 and 63.10022:

I. Emissions of Hydrogen Chloride shall not exceed, as a 30-boiler operating day rolling average, 0.0020 lb/mmBtu (mass per heat input) or 0.020 lb/MWh (mass per gross output).

ii. Acid Gases Alternative Testing Provisions:

Pursuant to 40 CFR 63.10000(c)(1)(v), in order to demonstrate compliance with the emission standard specified in Condition 6.6.9(d)(i), if the affected source does not use an HCl continuous emission monitoring system (HCl CEMS), the Permittee shall demonstrate continuous compliance through HCl performance testing repeated quarterly.

iii. Acid Gases Alternative Monitoring Provisions:

If the Permittee elects to demonstrate compliance with the HCl emission limit specified in Condition 6.6.9(d)(i) using an HCl CEMS, the Permittee shall install, certify, operate, and maintain the HCl CEMS in accordance with the requirements specified at 40 CFR 63.10010(e), 40 CFR 63.10020(a) through (d), and Appendix B to 40 CFR Part 63 Subpart UUUUU.

e. Mercury Alternative Monitoring Provisions:

The Permittee may elect to monitor emissions of mercury from affected EGUs using a mercury sorbent trap monitoring system in accordance with 40 CFR 63.10010(g), 40 CFR 63.10020(a) through (d), and Appendix A to 40 CFR Part 63 Subpart UUUUU, as an alternative to a mercury CEMS, as described in Condition 6.6.4(a)(ii).

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6.7 - Consent Decree

6.7 Consent Decree Incorporation Requirements

6.7.1. Introduction

This source is subject to certain requirements and limitations that were established by the Consent Decree entered July 17, 2013 by the court in United States of America v. Dominion Energy, Inc., Dominion Energy Brayton Point, LLC and Kincaid Generation, LLC, Civil Action No. 13-3086, U.S. District Court, Central District of Illinois, as amended pursuant to a Stipulation to Non-Material Modification to Consent Decree, executed December 5, 2013 (the "Consent Decree"). Pursuant to Paragraph 169 of the Consent Decree, the Permittee subsequently applied for and obtained a construction permit from the Illinois EPA, Application No. 14060006, which was issued December 10, 2015 (the "Construction Permit") and incorporates certain requirements and limitations of the Consent Decree that relate to this source. Pursuant to Paragraph 170 of the Consent Decree, the Permittee submitted an application on April 4, 2016, to incorporate the terms of the Construction Permit into this permit.

The Permittee also submitted an application for amendment to its CAAPP permit application on December 26, 2013, pursuant to Paragraphs 96 and 168 of the Consent Decree, to address other requirements of the Consent Decree, such as Compliance Assurance Monitoring (CAM), as addressed in Condition 7.1.13-2 and Table 7.1.13b of this permit.

6.7.2 Requirements

- a. For the affected boilers, the Permittee shall comply with the requirements of Conditions 2, 3.a., 4, 5 and 6 of Construction Permit 14060006, as applicable, which conditions and accompanying Attachment A are incorporated into this CAAPP permit by reference. A copy of Construction Permit 14060006, as issued December 10, 2015, is attached to this CAAPP permit for informational purposes as Attachment 6.
- b. For the purpose of the conditions of Construction Permit 14060006 that are incorporated into this CAAPP permit by reference, if any conflict arises between the terms of this CAAPP permit and the terms of the Consent Decree that are incorporated by reference by Construction Permit 14060006, the terms that are incorporated by reference shall govern. This includes conflicts between the definitions that apply elsewhere in this CAAPP permit and the definitions in the Consent Decree that are incorporated by reference by Construction Permit 14060006,

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which definitions shall govern the implementation of the applicable provisions of the Consent Decree.

Notes: As of the date of issuance of this CAAPP permit, enforcement of the Consent Decree had not been terminated, as provided for by Paragraph 207 of the Consent Decree. Accordingly, Conditions 4(b) and (c) and Condition 5 of Construction Permit 14060006, which would apply after the enforcement of the consent decree has been terminated, are not yet applicable.

In addition, when enforcement of the Consent Decree is terminated, Conditions 4(c)(i) and Condition 5(b)(i) of Construction Permit 14060006 would not apply unless and until the specific requirements for reporting related to the provisions of the Consent Decree are added to the body of this CAAPP permit.

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7.0 UNIT SPECIFIC CONDITIONS

7.1 Coal-Fired Boilers

7.1.1 Description

The Permittee operates two coal-fired boilers for electric generation. The boilers, which were built in 1967 and 1968, have nominal capacities of 6634 and 6406 mmBtu/hour and are served by a single stack. In addition to coal, these boilers fire natural gas during startup and for flame stabilization.

Nitrogen oxide (NO_x) emissions from the boilers are controlled by over-fire air (OFA) and selective catalytic reduction (SCR) systems. Particulate matter (PM) emissions from the boilers are controlled by electrostatic precipitators (ESP).

Sulfur dioxide (SO₂) emissions are controlled by the use of PRB low sulfur sub-bituminous coal and a dry sorbent injection (DSI) flue gas desulfurization system which injects a dry sorbent material such as sodium bicarbonate into the flue gas of each boiler prior to the electrostatic precipitator.

Mercury emissions from the boilers are controlled by an activated carbon injection (ACI) system which injects a sorbent such as activated carbon into the flue gas of each boiler prior to the ESP.

Note: The description in Condition 7.1.1 is for informational purposes only and implies no limits or constraints.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Boiler ID	Description	Emission Control Equipment
Boiler 1 BLR-1	Babcock and Wilcox Boiler	OFA, SCR, ESP, ACI and DSI
Boiler 2 BLR-2	Babcock and Wilcox Boiler	OFA, SCR, ESP, ACI and DSI

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7.1.3 Applicability Provisions

- a. An "affected boiler" for the purpose of these unit-specific conditions, is a boiler described in Conditions 7.1.1 and 7.1.2.
- b. Startup Provisions

Subject to the following terms and conditions, the Permittee is authorized to operate an affected boiler in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123), Condition 7.1.4(b) (35 IAC 212.202), and Condition 7.1.4(d) (35 IAC 216.121) during startup. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally describing the efforts that will be used "...to minimize startup emissions, duration of individual startups and frequency of startups."

- i. This authorization does not relieve the Permittee from the continuing obligation to demonstrate that all reasonable efforts are made to minimize startup emissions, duration of individual startups and frequency of startups.
- ii. The Permittee shall conduct startup of an affected boiler in accordance with written procedures prepared by the Permittee and maintained in the control room for the boiler, that are specifically developed to minimize emissions from startups and that include, at a minimum, the following measures:
 - A. Use of natural gas to heat the boiler prior to initiating burning of coal.
 - B. Timely energization of the ESP as soon as this may be safely accomplished without damage or risk to personnel or equipment.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.1.9(g) and 7.1.10-2(a).
- iv. As provided by 35 IAC 201.265, an authorization in a permit for excess emissions

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during startup does not shield a Permittee from enforcement for any violation of applicable emission standard(s) that occurs during startup and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

c. Malfunction and Breakdown Provisions

Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected boiler in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123), Condition 7.1.4(b) (35 IAC 212.202), and Condition 7.1.4(d) (35 IAC 216.121) in the event of a malfunction or breakdown of an affected boiler, including the coal crusher, the ash removal system, or the electrostatic precipitator. This authorization is provided pursuant to 35 IAC 201.149, 201.261, and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

- i. This authorization only allows such continued operation as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable reduce boiler load, repair the affected boiler, remove the affected boiler from service or undertake other action so that excess emissions cease.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.1.9(h), and 7.1.10-3(a). For

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these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the boiler out of service.

- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.1.4 Applicable Emission Standards

- a. The applicable requirements for the opacity of the emission of smoke or other particulate matter from the affected boilers are set forth in Condition 5.2.2(b).
- b. The emissions of PM from each affected boiler shall not exceed 0.1 lb/mmBtu of actual heat input in any one hour period, pursuant to 35 IAC 212.202.
- c. The total emission of SO₂ from the affected boilers shall not exceed 105,162 lb/hour, pursuant to 35 IAC 214.143, 214.182, and 214.183. These are the SO₂ emissions allowed by the following formula in 35 IAC 214.183:

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$$E = \frac{(H_A)^{0.11} (H_E)^2}{128}$$

Where:

E = Total allowable emissions of SO₂, in pounds per hour into the atmosphere in any one-hour period, from all fuel combustion emission units owned or operated by such person and located within 1 mile from the center point of any such unit.

H_A = Average actual stack height as determined by method outlined in 35 IAC 214 Appendix C.

H_E = Effective height of effluent release as determined by method outlined in 35 IAC 214 Appendix C.

- d. The emissions of CO from each affected boiler shall not exceed 200 ppm, corrected to 50 percent excess air, pursuant to 35 IAC 216.121.
- e. Intentionally Blank.
- f. The EGUs at the source are subject to the following requirements related to NO_x emissions pursuant to 35 IAC Part 217 Subpart V:
 - i. During each ozone control period (May 1 through September 30):
 - A. The emissions of NO_x from each EGU shall not exceed 0.25 lb/mmBtu of actual heat input based on an ozone control period average, for the EGUs, pursuant to 35 IAC 217.706(a), or
 - B. Notwithstanding the requirement in Condition 7.1.4(f)(i)(A), if the Permittee elects to participate in a NO_x averaging plan pursuant to 35 IAC 217.708(a), the average rate of emissions of NO_x from the Permittee's EGUs and all other eligible EGUs that are participating in such NO_x averaging demonstration, shall not exceed 0.25 lb/mmBtu of actual heat input, as averaged for the ozone control period, pursuant to 35 IAC 217.708(a) and (b). For this purpose, eligible EGUs include:

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(1) EGUs at this source, which are authorized by this permit to participate in a NO_x averaging demonstration, and (2) any other EGU that is authorized to participate in a NO_x averaging plan by a CAAPP permit or other federally enforceable permit issued by the Illinois EPA to the owner or operator of that EGU.

Note: Given the emission determination methods specified by 35 IAC 217.710, the emissions of NO_x for purposes of these standards are generally calculated in accordance with the federal Acid Rain Program and are different from the emissions determined for purposes of the NO_x Trading Program.

- ii. If the Permittee elects to have an EGU comply by participation in a NO_x averaging demonstration as provided for and authorized above:
 - A. The EGUs shall be included in only one NO_x averaging demonstration during an ozone control period, pursuant to 35 IAC 217.708(d).
 - B. The NO_x averaging demonstration shall only include other EGUs that are authorized through a federally enforceable permit to participate in a NO_x averaging demonstration and for which the owner or operator of the EGU maintains the required records, data and reports and submits copies of such records, data, and reports to the Illinois EPA upon request, pursuant to 35 IAC 217.708(c) and (g).
 - C. The effect of failure of the NO_x averaging demonstration to show compliance shall be that the compliance status of the EGUs shall be determined pursuant to Condition 7.1.4(f)(i)(A) as if the NO_x emission rate of the EGUs was not averaged with other EGUs, pursuant to 35 IAC 217.708(f).

Note: The above requirements also apply as a matter of rule to EGUs other than the EGUs if the owner or operator of such other EGUs elects to participate in a NO_x averaging demonstration.

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- g. The Acid Rain Program applicable requirements for the affected boilers are set forth in Condition 6.2.
- h. The Cross-State Air Pollution Rule applicable requirements for the affected boilers are set forth in Condition 6.3.
- i. The Best Available Retrofit Technology applicable requirements for the affected boilers are set forth in Condition 6.4.
- j. The 35 IAC 225 Subpart B applicable requirements for the affected boilers are set forth in Condition 6.5.
- k. The Mercury and Air Toxics Standards rule applicable requirements for the affected boilers are set forth in Condition 6.6.
- l. The Consent Decree applicable requirements for the affected boilers are set forth in Condition 6.7.

7.1.5 Non-Applicability of Regulations of Concern

- a. Pursuant to Section 39.5(7)(a) of the Act,
 - i. The Permittee is shielded from the following rules for the affected boilers when the boilers are using coal (solid fuel) as their principal fuel. This is because incidental use of natural gas or liquid fuel generally serves as a good combustion practice for firing of solid fuel and does not provide a decrease in emissions that can be used to reduce the emission rate that must be achieved for the emissions associated with combustion of solid fuel.
 - A. 35 IAC 212.207.
 - ii. If an affected boiler is not using coal (solid fuel) as its principal fuel, the affected boiler shall comply with the requirements of the following conditions. During such periods, for PM emissions, Condition 7.1.5(a)(ii)(A) shall substitute for Condition 7.1.4(b):
 - A. The emissions of PM from the affected boiler in any one hour period shall not

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exceed the amount, in lb/hr, allowed by the formula in 35 IAC 212.207.

- iii. For the purpose of the above conditions, an affected boiler shall be considered to be using coal (solid fuel) as its principal fuel if the use of natural gas and/or fuel oil is incidental to the use of solid fuel, occurring for specific purposes associated with routine firing of solid fuel, such as startup, opacity reduction emission mitigation, flame stabilization, or other temporary interruption in solid fuel supply. A boiler shall not be considered to be using solid fuel as its principal fuel if the use of natural gas and/or fuel oil is more than incidental to the firing of solid fuel in the boiler or the use of solid fuel is incidental to the operation of the boiler.
 - iv. The Permittee shall notify the Illinois EPA if the status of an affected boiler changes to or from using coal (solid fuel) as its principal fuel. This notification shall be provided at least 7 days in advance of such change in status unless the change results from a sudden event that precludes such advance notification, in which case notification shall be provided as soon as practicable prior to the change.
- b. Pursuant to 35 IAC 201.403(a), the Permittee is not subject to the requirements of 35 IAC Part 201 Subpart L for opacity monitoring because the Permittee conducts opacity monitoring of the affected boilers in accordance with the provisions of the NSPS, as specified at 40 CFR 75.14 of the federal Acid Rain Program.
 - c. The affected boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for SO₂ and NO_x Acid Rain Requirements, because the affected boilers are subject to Acid Rain Program requirements, pursuant to 40 CFR 64.2(b)(1)(iii).
 - d. The affected boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for SO₂ (Condition 7.1.4(c)), NO_x (Conditions 6.2.2 and 7.1.4(f)), and mercury

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(Condition 6.5.4(a)) State Rule Requirements, pursuant to 40 CFR 64.2(b)(1)(vi) because the affected boilers are subject to an emission limitation or standard for which this CAAPP permit specifies a continuous compliance determination method.

- e. The affected boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for CO (Condition 7.1.4(d)) State Rule Requirements because the affected boilers do not use an add-on control device to achieve compliance with an emission limitation or standard.
- f. The affected boilers are not subject to 40 CFR Part 60 Subpart Da, Standards of Performance for Electric Utility Steam Generating Units because the affected boilers did not commence construction, modification or reconstruction after September 18, 1978.
- g. The affected boilers are not subject to 40 CFR Part 60 Subpart CCCC, Standards of Performance for Commercial and Industrial Solid Waste Incineration Units because the affected boilers do not combust any solid waste as that term is defined in 40 CFR part 241.
- h. The affected boilers are not subject to 40 CFR Part 63 Subpart DDDDD or JJJJJJ, NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. This is because electric utility steam generating units (EGUs) covered by 40 CFR 63 Subpart UUUUU are not subject to 40 CFR 63 Subpart DDDDD or JJJJJJ.
- i. The affected boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for the emission standards set forth in Section 6.6 for mercury, filterable PM, total non-Hg HAP metals, individual non-Hg HAP metals, or Acid Gases, pursuant to 40 CFR 64.2(b)(1)(i), because the affected boilers are subject to emission limitations or standards proposed by the Administrator after November 15, 1990, i.e. 40 CFR Part 63, Subpart UUUUU.

7.1.6 Work Practices and Emissions Limitations

- a. As part of its operation and maintenance of the affected boilers, the Permittee shall perform a

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combustion evaluation on each boiler at least semi-annually, pursuant to Section 39.5(7)(d) of the Act. This evaluation shall consist of process measurements of the concentration of CO in the flue gas of the affected boiler, as well as any adjustments and/or corrective measures undertaken for the combustion systems of the boilers.

- b. In a semi-annual period in which the Permittee conducts a tune-up of the EGU burner and combustion controls as specified in Condition 6.6.3(e), such tune-up shall satisfy the semi-annual combustion evaluation requirement in Condition 7.1.6(a) for that period.
- c. Pursuant to Construction Permit 11120041, the Permittee shall install, operate and maintain instrumentation for the dry sorbent injection systems on the affected boilers to measure sorbent injection rates, by volume or mass. [T1]

7.1.7 Testing Requirements

Pursuant to Section 39.5(7)(d)(ii) of the Act, the Permittee shall have the PM and CO emissions of each affected boiler measured as specified below:

- a. i. Periodic PM emission measurements shall be made for the affected boilers within a time period determined from the compliance margin for the applicable PM emission standard, based on the results of the preceding PM measurement, as follows. For this purpose, the compliance margin is the extent to which the actual PM emissions as measured are lower than the applicable PM limit. For example, if the measured PM emissions of the affected boiler are 0.075 lb/mmBtu, the compliance margin for the applicable PM limit, 0.1 lb/mmBtu, would be 25 percent. $(0.100 - 0.075 = 0.025, 0.025/0.100 = 0.25$ or 25 percent)
- A. If the compliance margin is less than 20 percent, within 15 months of the previous measurement.
- B. If the compliance margin is between 20 and 40 percent, within 27 months of the previous measurement.

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- C. If the compliance margin is greater than 40 percent, within 39 months of the previous measurement.
- ii. Measurements of CO emissions shall be made as follows:
 - A. In conjunction with each subsequent measurement of PM emissions made pursuant to Condition 7.1.7(a)(i) (or a RATA for SO₂ or NO_x preceding such measurement), provided, however, that if measured CO emissions are no more than 100 ppm at 50 percent excess air, CO measurements need not be performed with the next PM measurement (or preceding RATA) but shall be performed with the second measurement of PM emissions following the measurement in which CO emissions were no more than 100 ppm (or a RATA preceding that PM measurement).
 - iii. A. If alternative fuel (i.e., any fuel other than coal, fuel oil, or gas) is greater than 3.0 percent by weight of the fuel burned in a boiler during a calendar quarter, unless measurements for PM and CO emissions have already been conducted while burning alternative fuel at a percentage that is greater than or equal to the percent of those materials burned in that calendar quarter or at the maximum rate at which the systems that feed alternative fuel to the boiler will be operated, the Permittee shall have measurements of PM and CO emissions from the boiler made during the next calendar quarter in which alternative fuel is burned in the boiler.
 - B. The Permittee shall conduct such measurements while firing the boiler at the lower of the following: (i) at least 1.25 times the percentage of alternative fuel material in the calendar quarter that triggered the testing; or (ii) at the maximum rate at which the systems that feed alternative fuel to the boiler will be operated. If the boiler has been burning a mix of alternative fuel

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materials, the mix of fuel during such measurements shall be approved by the Illinois EPA.

- C. The Permittee shall repeat such measurements if the percentage of alternative fuel burned in a boiler during a quarter is more than the percentage of such material being burned in the boiler when previous emission measurements were conducted.
- iv. Measurements of PM and CO emissions shall be made within 90 days (or such later date set by the Illinois EPA) following a request by the Illinois EPA for such measurements.
- b.
 - i. The Permittee shall operate each affected boiler at maximum normal operating load conditions during each performance test. Maximum normal operating load will be generally between 90 and 110 percent of design capacity but should be representative of unit specific normal operations during each test run, pursuant to 39.5(7)(c) and consistent with 40 CFR 63.10007(a)(2). In addition, the Permittee may perform measurements at other operating conditions to evaluate variation in emissions.
 - ii. Measurements shall be taken at an appropriate location in the stack associated with the affected boilers or another location in the exhaust ductwork of an individual boiler as approved by the Illinois EPA. If both boilers are operating, the boilers and their associated controls shall be operated in a similar manner while measurements are being performed, so that the results typify both boilers. If the operation of the affected boilers differs significantly, the Permittee may have to perform further measurements or separate measurements for each boiler at the request of the Illinois EPA, in accordance with Condition 7.1.7(a).
 - iii. The following Reference Methods and procedures shall be used for these measurements. Refer to 40 CFR 60, Appendix A for Reference Methods.

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Location of Sample Points	Reference Method 1
Gas Flow and Velocity	Reference Method 2
Flue Gas Weight	Reference Method 3
Moisture	Reference Method 4
Particulate Matter (PM)	Reference Method 5
Carbon Monoxide (CO)	Reference Method 10

Other test methods adopted by USEPA may be used in place of the above methods with the approval of the Illinois EPA.

- c. Except for minor deviations in test methods, as defined by 35 IAC 283.130, emission testing shall be conducted in accordance with a test plan prepared by the testing service or the Permittee and submitted to the Illinois EPA for review prior to emission testing, and the conditions, if any, imposed by the Illinois EPA as part of its review and approval of the test plan, pursuant to 35 IAC 283.220 and 283.230.
 - i. The Permittee shall submit this test plan within the time period provided in Condition 8.6.2 and the test plan shall include the information specified by Condition 8.6.2.
 - ii. Notwithstanding the above, as provided by 35 IAC 283.220(d), the Permittee need not submit a test plan for emission testing that will be conducted in accordance with the procedures used for previous tests accepted by the Illinois EPA or the previous test plan submitted to and approved by the Illinois EPA, provided that the Permittee's notification for testing, as required below, contains the information specified by 35 IAC 283.220(d)(1)(A), (B) and (C).
- d. The Permittee shall notify the Illinois EPA prior to conducting emission tests to enable the Illinois EPA to observe testing. Notification for the expected test date shall be submitted a minimum of 30 days prior to the expected date of testing. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual test date. The Illinois EPA may on a case-by-case basis accept shorter advance notice if it would not interfere with the Illinois EPA's ability to observe testing.

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- e. The Permittee shall submit the Final Report(s) for any required emission testing to the Illinois EPA within 45 days after the test results are compiled and finalized but no later than 120 days after the date of testing. The Final Report shall include the information specified in Condition 8.6.3 and the following information:
 - i. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.
 - ii. A description of any minor deviations from the test plan, as provided by 35 IAC 283.230(a).
 - iii. Detailed description of operating conditions during testing, including:
 - A. Source(s) of fuel and specifications (ash, sulfur and heat content).
 - B. Boiler operating information, i.e., firing rate of the affected boiler(s) (mmBtu/hr), composition of fuel as burned (ash, sulfur and heat content), and fuel blending ratio (%), if a blend of fuels is burned.
 - C. Combustion system information, i.e., level of excess air in the flue gas, and levels of CO, CO₂ or O₂ in the flue gas.
 - D. Control equipment operating parameters during testing.
 - E. Load during testing (gross megawatt output and steam flow).
 - F. Information on the usage of alternative fuel during testing, if testing was conducted to satisfy Condition 7.1.7(a)(iii).
 - iv. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.

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- v. The SO₂, NO_x, O₂ or CO₂, (hourly averages) and opacity data (6-minute averages) measured during testing.

7.1.8 Monitoring Requirements

- a. Pursuant to 40 CFR 75.14, and Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, operate, calibrate and maintain continuous monitoring equipment for the measurement of opacity from the affected boilers. For this purpose, a "shared" monitoring system may be operated at a location in the stack that is common to the affected boilers.
 - i. The Permittee shall operate this equipment in accordance with the general provisions for opacity monitoring systems in 40 CFR 75.10.
 - ii. These monitors shall be the primary basis for reporting of exceedances of Condition 5.2.2(b). (See Conditions 7.1.10-2(a) and 7.1.10-3(a).)
- b. Pursuant to 40 CFR 75.11 and Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, operate, calibrate and maintain a continuous emission monitoring system (CEMS) for the measurement of SO₂ emissions from the affected boilers.
 - i. This CEMS shall be used to demonstrate compliance with the limit in Condition 7.1.4(c) based on the average hourly SO₂ emission rate determined from monitored data from three-hour block averaging periods.
- c. Pursuant to 40 CFR 75.12, 35 IAC 217.710(a), and Section 39.5(7)(d)(iii) of the Act, the Permittee, shall install, calibrate, maintain and operate a CEMS for the measurement of NO_x emissions from the affected boilers, in accordance with the requirements of 40 CFR 75 Subpart B.
- d. Pursuant to Section 412 of the Clean Air Act and 40 CFR Part 75, the source is required to operate continuous monitors for the affected boilers for various parameters, including SO₂, NO_x, volumetric flow and opacity, along with a computerized data acquisition and handling system for collected data. (See also Condition 6.2.3) To the extent that

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applicable performance specifications and operating requirements for monitoring under 40 CFR Part 75 are inconsistent with the above requirements for monitoring, the procedures of 40 CFR Part 75 shall take precedence. (See also Condition 8.2)

e. Compliance Assurance Monitoring (CAM) Requirements

The affected boilers are subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM for the standard set forth or referenced in Conditions 6.7.2(a) and 7.1.4(b) as addressed in Condition 7.1.13-2.

7.1.9 Recordkeeping Requirements

a. Operational Records for the Affected Boilers

Pursuant to Sections 39.5(7)(a) and (e) of the Act, the Permittee shall maintain the following operational records for the affected boilers:

- i. A. Load (in terms of either gross megawatts output or steam flow) on an hourly basis for each affected boiler.
- B. If the Permittee is relying on data for heat input for purposes of compliance with Condition 7.1.4(b) that is different from that recorded pursuant to the federal Acid Rain Program, records of heat input (mmBtu, on an hourly basis) or the conversion factors that the Permittee relies upon to convert from boiler load as recorded above to hourly heat input.
- ii. Records for each day when an alternative fuel (i.e., a fuel other than coal, gas or oil) was burned, including the estimated amount of each such material burned and the affected boiler(s) in which it was burned.
- iii. Total operating hours (hours/quarter) for each affected boiler.
- iv. A. Amount of coal consumed (tons/quarter).
- B. Amount of each alternative fuel consumed (tons, gallons, cubic feet per quarter, as appropriate).

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- v. A. Records of agreements with suppliers of alternative fuel(s), including origin of material, specifications for heat and ash content, and representative data for elemental composition of such material, including mercury and other heavy metals, chlorine and fluorine.
- B. Records for each load of such fuel(s) received at the source, which shall include date, supplier name, type of fuel and amount (tons).
- vi. Operating records, maintenance and repair records, or other records for each affected boiler documenting the performance of the combustion evaluation required by Condition 7.1.6(a), including the date of the evaluation, the concentrations of CO measured at the start and conclusion of the evaluation, and a description of any adjustments and/or corrective measures undertaken for the combustion systems of the boiler.
- b. Records for Control Equipment

Pursuant to Sections 39.5(7)(a) and (e) of the Act, the Permittee shall maintain the following records for the air pollution control equipment on the affected boilers:

i. Maintenance and Repair Record

A maintenance and repair record for each control device, which shall list the activities performed, with date and description. (See also Condition 9.6.1, Control Equipment Maintenance Records.)

ii. Electrostatic Precipitators (ESPs)

When an affected boiler served by the ESP is in operation:

- A. The status of each field in the ESP shall be recorded at least once per shift.
- B. The following numerical data shall be recorded at least once per day: (1)

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Primary voltages and currents; and (2)
Secondary voltages and currents.

iii. Electronic Instrumentation/Operating System
for the ESPs

- A. The documentation provided by the supplier including any recommended inspection and repair procedures.
- B. The operating procedure for the system developed by the Permittee.

iv. Selective Catalytic Reduction (SCR) Systems

- A. Manufacturer/vendor or Permittee developed operating and maintenance procedures.
- B. Operating records including system settings.
- C. Usage of reagent (tons/month).
- D. The maintenance and repair records for an SCR system shall also address activities related to the SCR catalyst, including addition or replacement of catalyst.

v. Activated Carbon Injection (ACI) Systems

Pursuant to Construction Permit 08070010, the Permittee shall maintain records for the ACI Systems:

- A. Operating records for the affected system that identify the sorbent that is being used and each period of time when the affected boiler was in operation when the system was not being operated. [T1R]
- B. Maintenance and repair records for the system that list the activities performed, with date and description. [T1]

c. Records for Continuous Opacity Monitoring Systems

Pursuant to Section 39.5(7)(e) of the Act, the Permittee shall maintain records for the opacity

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monitoring system on each affected boiler required by Condition 7.1.8(a) that shall include the following:

- i. Operating records for each opacity monitoring system, including:
 - A. Opacity measurements (6-minute, one-hour average and three-hour block average).
 - B. Performance testing measurements and evaluations, calibration checks, and other quality assurance/control activities.
 - C. Maintenance and adjustment performed.
 - D. Periods other than performance of quality assurance, calibration, and maintenance, as addressed above, when the monitor was inoperative, with reason.
 - E. Quarterly reports submitted in accordance with Conditions 7.1.10-2(a) and (d).
- ii. Records to address compliance with Conditions 5.2.2(b), including:
 - A. Each period when the opacity exceeded 30 percent on a 6-minute block average, with date, time, whether it occurred during startup, shutdown, malfunction or breakdown, and further explanation of the incident.

d. Records for Continuous SO₂ Monitoring Systems

Pursuant to Section 39.5(7)(e) of the Act, the Permittee shall maintain records for the SO₂ CEMS on the affected boilers required by Condition 7.1.8(b) that shall include:

- i. Operating records for the SO₂ CEMS, including:
 - A. SO₂ emission data in the units of the applicable standard (lb/mmBtu) .
 - B. Performance testing measurements and evaluations, calibration checks, and

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- other quality assurance/control activities.
- C. Maintenance and adjustments performed.
- D. Periods when the SO₂ CEMS was inoperative, with date, time and reason.
- E. Data reduction information.
- F. Quarterly reports submitted in accordance with Condition 7.1.10-2(b).
- ii. Records to verify compliance with the limitation of Condition 7.1.4(c), including:
 - A. SO₂ emissions in the terms of the applicable standard (lb/hour) from the affected boilers on an hourly basis, as derived from the data obtained by the SO₂ CEMS.
 - B. The date and time of any three-hour block averaging period when the total SO₂ emission rate, as recorded above, exceeded 105,162 lb/hour as allowed by Condition 7.1.4(c), with the calculated SO₂ emission rate. These records shall be prepared from the above records at least quarterly as needed to verify compliance with the limitation of Condition 7.1.4(c).
- iii. The Permittee shall record for each hour the information required by 40 CFR 75.57(c) for each affected boiler.
- e. Records for Continuous NO_x Monitoring

Pursuant to Section 39.5(7)(e) of the Act and 35 IAC 217.712(a), the Permittee shall maintain records for the NO_x CEMS on the affected boilers required by Condition 7.1.8(c) in accordance with the applicable recordkeeping requirements of 40 CFR 75, that shall include the following:

 - i. Operating records for each NO_x CEMS, including:

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- A. NO_x emission data in the units of the applicable standards (lb/mmBtu) .
- B Performance testing measurements and evaluations, calibration checks and other quality assurance/control activities.
- C. Maintenance and adjustments performed.
- D. Periods when NO_x CEMS was inoperative, with date, time and reason.
- E. Data reduction information.
- F. Quarterly reports submitted in accordance with Condition 7.1.10-2(c).
- ii. Records to verify compliance with the limitation of Conditions 7.1.4(f) including:
 - A. NO_x emissions in the terms of the applicable standard (lb/mmBtu) from the affected boilers on an hourly basis, as derived from the data obtained by the NO_x CEMS.
- iii. The Permittee shall record the applicable information required by 40 CFR 75.57(d) for each affected boiler.
- f. Acid Rain Program

Records for the continuous emission monitoring required for the affected boilers by the Acid Rain Program should be kept by the Permittee in accordance with 40 CFR Part 75, including the General Recordkeeping Provisions; the General Recordkeeping Provisions for Specific Situations, if applicable; and Certification, Quality Assurance and Quality Control Record Provisions [See Condition 6.2.3].
- g. Records for Startups of Affected Boilers, pursuant to Section 39.5(7)(b) of the Act
 - i. The Permittee shall maintain written startup procedures for each affected boiler, as required by Condition 7.1.3(b)(ii).

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- ii. The Permittee shall maintain the following records related to startups of an affected boiler:
 - A. For all startups on each affected boiler.
 - I. Date, time, and duration of the startup.
 - II. A description of the startup, the reason(s) for the startup, and an indication of whether or not written startup procedures were followed. If any procedures were not followed, the records shall include any departures from established procedures and the reason the procedure could not be followed.
 - B. For each startup of an affected boiler where an exceedance of a relevant standard occurred during startup or the Permittee believes that compliance with the PM standard likely was not maintained during the startup, maintain the following additional records for such startup.
 - I. An explanation of the nature of such exceedance(s), including the qualitative or, if available, quantitative magnitude of such excess emissions.
 - II. A description of the actions taken or to be taken to minimize the magnitude and duration of any excess emissions.
 - III. An explanation whether similar incidents could be prevented in the future and if so, a description of the actions taken or to be taken to prevent similar incidents in the future.
 - C. For each startup when the duration of startup from initial firing of fuel to stable operation of the generating unit

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at load exceeded 26 hours maintain the following additional records for such startups.

- I. A description of the events that led up to the extended startup duration and reason(s) for the extended startup duration.
- II. The actions taken to minimize emissions and the duration of the startup.
- III. An explanation whether similar incidents might be prevented in the future and if so, the corrective actions taken or to be taken to prevent similar incidents.

h. Records for Continued Operation During Malfunctions And Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (e) of the Act, the Permittee shall maintain the following records related to malfunction and breakdown for the affected boilers:

- i. Maintenance and repair records for the affected boilers that address aspects or components of the boilers for which malfunction or breakdown has resulted in excess emissions, which shall list the activities performed on such aspects or components, with date, description and reason for the activity. In addition, in the maintenance and repair log(s) for control equipment required by Condition 7.1.9(b)(i), the Permittee shall also list the reason for the activities that are performed.
- ii. Records for each incident when operation of an affected boiler continued with excess opacity or emissions during malfunction or breakdown as addressed by Condition 7.1.3(c), that shall include the following information:
 - A. Date, time, duration (i.e., the length of time during which operation continued with excess opacity or emissions until corrective actions were taken or the

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boiler was taken out of service), and description of the incident.

- B. The corrective actions used to reduce the quantity of emissions and to reduce the duration of the incident.
- C. Confirmation of fulfillment of the requirements of Condition 7.1.10-3(a), as applicable, including copies of any follow-up reports submitted pursuant to Condition 7.1.10-3(a)(ii).
- D. If opacity during the incident exceeded the applicable standard, as listed in Condition 5.2.2(b), for two or more hours, emissions exceeded an applicable hourly standard, as listed in Condition 7.1.4(b) or (d), or the Permittee believes that compliance with an applicable hourly PM standard, as listed in Condition 7.1.4(b), likely was not maintained:
 - I. A detailed explanation of:
 - (1) Why continued operation of the affected boiler was necessary, and
 - (2) The probable cause of the incident.
 - II. The preventative measures that have been or will be taken to prevent similar incidents or reduce their frequency and severity, including any repairs to the affected boilers and associated equipment and any changes to operating and maintenance procedures.
- E. If PM emissions during the incident exceeded an applicable hourly standard, as listed in Condition 7.1.4(b), or the Permittee believes that compliance with the PM standard likely was not maintained, estimates of the magnitude of emissions of PM during the incident, with

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magnitude estimated on a qualitative or, if available, quantitative basis.

- F. If CO emissions during the incident exceeded an applicable hourly standard, as listed in Condition 7.1.4(d), estimates of the magnitude of emissions of CO during the incident, with magnitude estimated on a qualitative or, if available, quantitative basis.

i. Records for Continuous Monitoring Systems

i. Monitoring Plans

- A. Pursuant to 40 CFR 75.53(a)(2), the Permittee shall prepare and maintain a monitoring plan for each continuous emissions or opacity monitoring system. The monitoring plan shall contain sufficient information on the continuous emission or opacity monitoring system to demonstrate that all unit SO₂ emissions, NO_x emissions, CO₂ emissions, and opacity are monitored and reported.
- B. Pursuant to 40 CFR 75.53(b), whenever the Permittee makes a replacement, modification, or change in the certified CEMS or continuous opacity monitoring system, including a change in the automated data acquisition and handling system or in the flue gas handling system, that affects information reported in the monitoring plan, then the Permittee shall update the monitoring plan.
- C. Pursuant to 40 CFR 75.53(e), each monitoring plan shall contain the information specified in 40 CFR 75.53(e)(1) in electronic format and the information specified in 40 CFR 75.53(e)(2) in hardcopy format. Electronic storage of all monitoring plan information, including the hardcopy portions, is permissible provided that a paper copy of the information can be furnished upon request for audit purposes.

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ii. General recordkeeping provisions

- A. Pursuant to 40 CFR 75.57(a), the Permittee shall maintain for each affected boiler records of all continuous monitoring system measurements, data, reports, and other information required by 40 CFR Part 75 at the source in a form suitable for inspection for at least three (3) years from the date of each record.
 - B. Pursuant to 40 CFR 75.57(b), the Permittee shall record for each affected boiler hourly information on unit operating time, heat input rate, and load, as specified at 40 CFR 75.57(b)(1) through (7).
- j. Pursuant to Construction Permit 11120041, the Permittee shall maintain operating records for the rate of application of sorbent (tons/hour) for each affected boiler. [T1]

7.1.10-1 Reporting Requirements - Reporting of Deviations

a. Prompt Reporting of Deviations

For each affected boiler, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as specified below. These notifications shall include a description of such deviations, including whether they occurred during startup or malfunction/breakdown, and a discussion of the probable cause of such deviations, any corrective actions taken, and any preventative measures taken [Section 39.5(7)(f)(ii) of the Act].

- i. For those breakdown or malfunction PM or opacity events that require notification and reporting pursuant to Condition 7.1.10-3(a), notification and reporting shall be provided pursuant to Condition 7.1.10-3(a) rather than 7.1.10-2(d).
- ii. Notification with the quarterly or annual reports required by Conditions 7.1.10-2(b), (c), (d) and (e) for deviations from Conditions 7.1.4(a), (b), (c) and (f) and from the requirements of Condition 7.1.8 for emissions monitoring, unless notification and

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reporting for that deviation is required pursuant to Condition 7.1.10-3(a).

- iii. Notification with the quarterly reports required by Condition 7.1.10-2(a) for deviations from the work practice requirements and recordkeeping requirements.

b. Periodic Reporting of Deviations

The quarterly reports required by Condition 7.1.10-2(a) shall include the following information for the affected boilers related to deviations from permit requirements during the quarter [Sections 39.5(7)(a) and (f)(i) of the Act].

- i. A listing of all notifications and reports for instances of deviations that have been provided in writing to the Illinois EPA pursuant to Condition 7.1.10-3(a). For this purpose, the Permittee need not resubmit copies of these previous notifications or reports but may elect to supplement such material.
- ii. Detailed information, as required by Condition 7.1.10-1(a)(ii) or (iii), for all other deviations not addressed in the above listing.

7.1.10-2 Reporting Requirements - Regular Reports

a. Quarterly Reports

In place of the semi-annual monitoring reports otherwise required by Condition 8.6.1, the Permittee shall submit quarterly reports to the Illinois EPA pursuant to Sections 39.5(7)(a) and (f) of the Act.

- i. These reports shall include the following information for operation of the affected boilers during the quarter:
 - A. The total operating hours for each affected boiler, as also reported in accordance with 40 CFR Part 75.
 - B. The greatest hourly load achieved by each affected boiler (steam flow or gross megawatts).

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- C. A discussion of significant changes in the fuel supply to the affected boilers, if any, including changes in the source of coal, the introduction of new fuel materials other than coal, gas and oil, and changes in the source of such other fuel materials or the maximum rate at which they will be fired.
 - D. A list of the startups of each affected boiler, including the date, duration and description of each startup, accompanied by a copy of the records maintained pursuant to Condition 7.1.9(g)(ii)(C) for each startup for which such records were required.
- ii. These reports shall include the information specified in Conditions 7.1.10-2(b), (c) and (d) for SO₂, NO_x, and PM emissions and opacity from the affected boilers during the quarter and for the operation of required continuous monitoring systems during the quarter.
 - iii. A. These reports shall be submitted after the end of every calendar quarter as follows:

Monitoring Period	Submittal Deadline
January - March	May 15
April - June	August 15
July - September	November 15
October - December	February 15
- b. Reporting of SO₂ Emissions

Pursuant to Sections 39.5(7)(a) and (f) of the Act, the Permittee shall report the following information for the affected boilers to the Illinois EPA with its quarterly reports pursuant to Condition 7.1.10-2(a):

- i. Summary information on the performance of the SO₂ CEMS, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the SO₂ CEMS was not inoperative,

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repaired or adjusted, such information shall be stated in the report as specified by 40 CFR 60.7(c)(4).

- ii. If specifically requested by the Illinois EPA or the CEMS downtime was more than 5 percent of the total operating time for the affected boilers: the date and time identifying each period during which the CEMS was inoperative except for zero and span checks, and the nature of CEMS repairs or adjustments and a summary of quality assurance data consistent with 40 CFR Part 75, i.e., the dates and results of the Linearity Test(s) and any Relative Accuracy Test Audit(s) during the quarter, a listing of any days when a required daily calibration was not performed, and the date and duration of any periods when the CEMS was "out-of-control" as addressed by 40 CFR 75.24.
- iii. The following information for each period when SO₂ emissions were in excess of the applicable standard specified in Condition 7.1.4(c)*. When there were no such exceedances, this shall be stated in the report.
 - A. The starting date and time of the SO₂ excess emissions.
 - B. The duration of the excess emissions.
 - C. The one-hour and three-hour average (lb/hour) for each three-hour block of excess emissions.
 - D. A detailed explanation of the cause of the excess emissions if known, including whether such excess emissions, occurred during startup, malfunction or breakdown of the boiler.
 - E. A detailed explanation of any corrective actions taken.
- * For SO₂ emissions, the averaging period is a three-hour block average, as used to determine compliance with the limitations of Condition 7.1.4(c). The records for excess emissions shall consist of three-

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hour block emission averages during which the limitation was exceeded.

c. Reporting of NO_x Emissions

Pursuant to Sections 39.5(7)(a) and (f) of the Act, the Permittee shall report the following information for the affected boilers to the Illinois EPA with its quarterly reports pursuant to Condition 7.1.10-2(a):

- i. Summary information on the performance of the NO_x CEMS, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the NO_x CEMS was not inoperative, repaired or adjusted, such information shall be stated in the report as specified by 40 CFR 60.7(c)(4).
- ii. If specifically requested by the Illinois EPA or the CEMS downtime was more than 5 percent of the total operating time for the affected boilers: the date and time identifying each period during which the CEMS was inoperative except for zero and span checks, and the nature of CEMS repairs or adjustments and a summary of quality assurance data consistent with 40 CFR Part 75, i.e., the dates and results of the Linearity Test(s) and any Relative Accuracy Test Audit(s) during the quarter, a listing of any days when a required daily calibration was not performed, and the date and duration of any periods when the CEMS was "out-of-control" as addressed by 40 CFR 75.24.

d. Reporting Related to Opacity and PM Emissions

Pursuant to Sections 39.5(7)(b) and (f) of the Act, the Permittee shall report the following information for the affected boilers to the Illinois EPA with its quarterly reports pursuant to Condition 7.1.10-2(a):

- i. Information on the performance of the opacity monitoring system and excess emissions, as required for a "Summary Report" as specified by 40 CFR 60.7(d). Additionally, the quarterly report shall also include:

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- A. The total operating time of the affected boiler; and
 - B. The operating status of the opacity monitoring system, including the dates and times of any periods during which it was inoperative except for zero and span checks.
- ii. When no excess opacity occurred or the continuous opacity monitoring system has not been inoperative, repaired or adjusted, such information shall be stated in the report as specified by 40 CFR 60.7(c)(4).
 - iii. The following information for each period when opacity exceeded 30 percent, based on a 6-minute block average:
 - A. A summary of information for each period of excess opacity that includes:
 - I. The starting date and time of the excess opacity.
 - II. The duration of the excess opacity.
 - III. The magnitude of excess opacity, based on six minute average opacity, including:
 - a. The percent opacity for each six-minute period in excess of the applicable standard.
 - b. The start time of each six-minute period in excess of the applicable standard.
 - IV. The cause of excess opacity, if known, including whether such excess opacity occurred during startup, malfunction or breakdown of an affected boiler.
 - V. Any corrective actions taken.
 - VI. Identification of any previous reports for the incidents during the quarter submitted to the Illinois EPA

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pursuant to Condition 7.1.10-3(a)(ii). For this purpose, the Permittee need not resubmit copies of such report but may elect to supplement such material.

VII. Information required by Conditions 7.1.9(h)(ii)(A), (B), and (D)(I) for incidents when operation of an affected boiler continued during malfunction or breakdown with excess opacity that are not addressed by individual reports submitted pursuant to Condition 7.1.10-3(a)(ii).

Note: Because the Permittee is reporting in accordance with the requirements of the NSPS, 40 CFR 60.7(c) and (d) for an affected boiler for opacity, pursuant to the federal Acid Rain Program, as included above, the Permittee is not subject to reporting pursuant to 35 IAC 201.405 [35 IAC 201.403(a)].

iv. The following information for periods when PM emissions were in excess of the limitation in Condition 7.1.4(b). If there were no such periods of excess emissions during the reporting period, the quarterly report shall so state.

A. A summary of information for each period of excess emissions that includes:

- I. The starting date and time of the excess emissions.
- II. The duration of the excess emissions.
- III. The qualitative or, if available, quantitative magnitude of the excess emissions.
- IV. The means by which the excess emissions were indicated or identified, if other than the level of opacity.

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- V. A detailed explanation of the cause of the excess emissions, including whether the excess emissions occurred during startup, malfunction or breakdown.
 - VI. A detailed explanation of any corrective actions taken.
 - VII. Identification of the previous reports for incidents submitted to the Illinois EPA pursuant to Condition 7.1.10-3(a)(ii), if any. For this purpose, the Permittee need not resubmit copies of such report but may elect to supplement such material.
- v. The following further information related to opacity exceedances or groups of opacity exceedances during the quarter that resulted from the same or similar cause(s):
- A. For opacity exceedances or groups of exceedances with "recurring" cause(s) (i.e., cause(s) that also resulted in exceedances(s) during the previous quarter): an explanation of any particular circumstances or factors during the current quarter that affected the number or magnitude of such exceedances; a discussion of any changes in the corrective actions taken in response to such exceedances during the current quarter as compared to the previous quarter; and a discussion of any additional preventative measures that were taken during the current quarter to reduce the number or magnitude of exceedances.
 - B. For opacity exceedances or groups of exceedances with "new" cause(s) (i.e., cause(s) that did not result in opacity exceedance(s) during the previous quarter): an explanation of the cause(s) or probable cause(s) of such exceedance(s), to the extent known; a discussion of any particular circumstances or factors during the

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quarter that resulted in such exceedance(s); the corrective action(s) taken, if any, with explanation of how those action(s) functioned to end the exceedance(s); and a discussion of any preventive measures taken to reduce the number or magnitude of exceedance(s).

- vi. A glossary of specialized technical terms commonly used by the Permittee in its reports pursuant to this Condition 7.1.10-2(d).
- e. Reporting of NO_x Emissions for the Ozone Control Period

The Permittee shall submit a report to the Illinois EPA by November 30 of each year that demonstrates whether the affected boilers have complied with Condition 7.1.4(f), pursuant to 35 IAC 217.712(d) and (e).

- i. If the Permittee is demonstrating compliance on a unit-specific basis with Condition 7.1.4(f)(i)(A), this report shall contain the information specified by 35 IAC 217.712(d) including the heat input and NO_x emissions of the units for the ozone control period.

- ii. If the Permittee is demonstrating compliance by means of "NO_x averaging" as authorized by Condition 7.1.4(f)(ii)(B), this report shall contain the information specified by 35 IAC 217.712(e) and other related information as follows:

- A. In all cases, for each affected boiler covered by this permit that is participating in a NO_x average demonstration, the Permittee shall report the following:

- I. Identification of the other EGUs that are participating in the demonstration, including identification of the source that is the lead party for the demonstration and that is also taking responsibility for submitting the information required

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by Condition 7.1.10-2(e)(ii)(B)
below.

- II. A statement confirming that the unit is eligible to participate in an averaging demonstration, i.e., the unit is included in only one demonstration [35 IAC 217.708(d)] and the Permittee is complying with applicable recordkeeping and reporting requirements for the unit, pursuant to 35 IAC 217.708(c) and (g).
 - III. The average NO_x emission rate for the unit, with calculations and supporting information, as required by 35 IAC 217.712(e)(2) and (3), including the heat input and NO_x emissions of the unit for the ozone control period.
 - IV. A statement whether the unit would show compliance on their own in the absence of averaging.
- B. If the Permittee is the lead party for a NO_x averaging demonstration that includes units operated by other companies, the Permittee shall report the following:
- I. Copies of the information provided by other parties to the lead party for the EGU participating in the demonstration, which include all material required by Condition 7.1.10-2(e)(ii)(A) above (unless or except as this information is provided with the submittal by a person who is a responsible official for the EGU participating in the demonstration).
 - II. The averaged NO_x emission rate for all EGUs participating in the demonstration, with complete supporting calculations, as required by 35 IAC 217.712(e)(1).

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III. A statement whether the demonstration shows compliance.

- f. Submittal of Supplemental Information Related to NO_x Emissions during the Ozone Control Period

The Permittee shall submit copies of any records and data required by 35 IAC 217.712 to the Illinois EPA within 30 days after receipt of a written request by the Illinois EPA [35 IAC 217.712(g)].

- g. Acid Rain Program Reporting

Pursuant to Section 412 of the Clean Air Act and 40 CFR Parts 72 and 75, the source is subject to the reporting requirements of 40 CFR Part 75, which includes General Provisions; Notifications; Initial Certification or Recertification Application; Quarterly Reports; and Opacity Reports [See Condition 6.2.3]. Pursuant to Section 39.5(17)(m) of the Act, the designated representative of the source must concurrently submit to the Illinois EPA in the same electronic format specified by the USEPA, the data and information submitted to USEPA on a quarterly basis pursuant to 40 CFR 75.64.

7.1.10-3 Reporting Requirements - Notifications

- a. Reporting When Continued Operation Occurred During Malfunctions And Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA for incidents when operation of an affected boiler continued with excess emissions or excess opacity during malfunction or breakdown as addressed by Condition 7.1.3(c). These requirements do not apply to such excess emissions, if any, that occur during startup or shutdown of the affected boiler.

- i. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile or electronic mail, for each incident in which the opacity from an affected boiler exceeds 30 percent for eight or more 6-minute averaging periods within a two-hour period unless the Permittee has begun the shutdown of the affected boiler by such time. (Otherwise, if opacity during an incident only

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exceeds 30 percent for no more than seven 6-minute averaging periods within a two-hour period, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.1.10-2(d).)

- ii. Upon conclusion of each incident in which the applicable PM emission standard was exceeded or in which an exceedance of the opacity standard is two hours or more in duration, the Permittee shall submit a follow-up report to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a copy of the records for the incident required by Condition 7.1.9(h)(ii)(A), (B) and (D).

7.1.11 Anticipated Operating Scenarios/Operating Flexibility

The Permittee is authorized to make the following operational changes with respect to each affected boiler without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements; to properly obtain a construction permit in a timely manner for any activity constituting construction or modification as defined in 35 IAC 201.102 or, as applicable, 40 CFR 52.21(a)(2) or 35 IAC 203.207; and to comply with other legal requirements that apply to such a change:

- a. Operation of additional air pollution control equipment, which is addressed by a separate construction permit.
- b. Burning of coal or a mix of coal from different suppliers.
- c. Burning of the following materials in conjunction with burning of standard fuels, provided that such materials can be accommodated with the existing fuel handling system and the burners in the affected boilers, and such materials do not make up more than 10 percent by weight of the fuel supply to the boiler on a quarterly basis:
 - i. Used oil generated at the source.
 - ii. Alternative fuels that do not constitute waste and were not generated from municipal waste or

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hazardous waste, provided that such fuels are shipped to the source in homogeneous form prepared for use as fuel (e.g., a shipment of tire derived fuel). Such alternative fuels include materials such as petroleum coke, tire derived fuel (as defined at Section 54.10b of the Act), clean lumber (as defined at 40 CFR 60.2265), shredded polyethylene agricultural containers, and seed corn.

Note: Other requirements unrelated to air pollution control may apply to burning of alternative fuels, such as Standards for Management of Used Oil, 35 IAC Part 739.

7.1.12 Compliance Procedures

- a. i. Compliance with the opacity limitation of Condition 5.2.2(b) (30 percent opacity) is addressed by the average opacity calculated from 6-minute periods of opacity measurements from the continuous opacity monitoring system operated in accordance with the relevant requirements of Condition 7.1.8(a) and the recordkeeping requirements of Condition 7.1.9.
- ii. Notwithstanding Condition 7.1.12(a)(i) above, should the Permittee choose to rely on 35 IAC 212.123(b) to allow opacity greater than 30 percent (6-minute average) from the affected boilers, the Permittee shall do the following:
 - A. Maintain records for the affected boilers of short-term opacity data, that is, either a continuous chart recording of measured opacity, a record of discrete measurements of opacity taken no more than 15 seconds apart, or a record of 1-minute average opacity data determined from four or more data points equally spaced during each minute period, to determine whether opacity from the boilers exceeded 30 percent opacity.
 - B. Have the capability to review such short-term opacity data for the affected boilers to identify:
 - I. Any hour in which opacity exceeded 30 percent, and then, for such

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hour: (1) the duration of opacity in excess of 30 percent; (2) whether opacity ever exceeded 60 percent; and (3) whether the duration of opacity in excess of 30 percent was more than 8 minutes in aggregate.

II. Whether opacity in excess of 30 percent occurred in more than three hours in a 24-hour period.

- C. For other emission units at the source, have the ability to review any opacity data required to be collected and kept pursuant to other provisions of this permit and that is representative of such units.
- D. In the reports required by Condition 7.1.10-2(d), confirm that the relevant short-term opacity data shows that the terms of 35 IAC 212.123(b) are satisfied when 35 IAC 212.123(b) is relied upon.
- E. Notify the Illinois EPA with its next quarterly report if it changes the type of short term opacity data that it is collecting pursuant to Condition 7.1.12(a)(ii)(A) for use in conjunction with reliance on 35 IAC 212.123(b).

Note: Because the affected boilers are ducted to a common stack served by a single opacity monitor, the two affected boilers must be treated as a single emission unit if the Permittee chooses to rely on 35 IAC 212.123(b).

- b. Compliance with PM emission limitation of Condition 7.1.4(b) is addressed by testing requirements in Condition 7.1.7, continuous opacity monitoring in accordance with Condition 7.1.8(e) and the relevant recordkeeping required by Condition 7.1.9.
- c. Compliance with the SO₂ emission limitation of Condition 7.1.4(c) is addressed by continuous emission monitoring in accordance with Condition 7.1.8(b) and the relevant recordkeeping required by Condition 7.1.9(d).

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- d. Compliance with the CO emission limit of Condition 7.1.4(d) is addressed by the required work practices in Condition 7.1.6(a), emission testing in accordance with Conditions 7.1.7 and the relevant recordkeeping required by Condition 7.1.9.
- e. Compliance with the NO_x emission limitation of Condition 7.1.4(f) is addressed by the continuous monitoring and the relevant recordkeeping required by Conditions 7.1.8(c) and 7.1.9(e).
- f. Compliance with the work practices required by Condition 7.1.6(a) is addressed by the relevant recordkeeping required by Condition 7.1.9.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

7.1.13-1 Intentionally Blank.

7.1.13-2 Compliance Assurance Monitoring Requirements

- a. Pursuant to 40 CFR 64.7(a), the Permittee shall comply with the CAM requirements in Tables 7.1.13a and 7.1.13b below.
- b. Intentionally Blank.
- c. Pursuant to 40 CFR 64.7(a), the Permittee shall comply with the following CAM requirements and the requirements in Condition 7.1.13-2(d) through (g).
 - i. Proper Maintenance and Continued Operation
 - A. Pursuant to 40 CFR 64.7(b), at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
 - B. Pursuant to 40 CFR 64.7(c), except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the

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pollutant-specific emissions unit (PSEU) is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The Permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

ii. Response to Excursions

- A. Pursuant to 40 CFR 64.7(d)(1), upon detecting an excursion, the Permittee shall restore operation of the PSEU (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distributed control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

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- B. Pursuant to 40 CFR 64.7(d)(2), determination of whether the Permittee has used acceptable procedures in response to an excursion will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

d. Recordkeeping

Pursuant to 40 CFR 64.9(b)(1), the Permittee shall maintain records of the monitoring data, monitor performance data, corrective actions taken, monitoring equipment maintenance, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under Conditions 7.1.9(c)(i) or 7.1.13-2 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

e. Reporting

Pursuant to Sections 39.5(7)(b) and (f) of the Act, the Permittee shall submit the following as part of the Quarterly Monitoring Reports required by Condition 7.1.10-2.

- i. Summary information on the number, duration, and cause of excursions, and the corrective actions taken, pursuant to 40 CFR 64.6(c)(3), 40 CFR 64.9(a)(2)(i), and Condition 7.1.10-2(d)(iv), except as otherwise provided in 40 CFR Part 64, including 64.7(d).
- ii. Summary information on the number, duration, and cause for monitoring equipment downtime incidents, other than downtime associated with calibration checks, pursuant to 40 CFR 64.6(c)(3), 40 CFR 64.9(a)(2)(ii), and Condition 7.1.10-2(d)(i) and (ii).

f. Quality Improvement Plans (QIP)

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Pursuant to 40 CFR 64.8, based on the results of any future determination made under 40 CFR 64.7(d)(2), the Administrator or the Illinois EPA may require the Permittee to develop and implement a QIP under separate permit action, as appropriate, under Sections 39.5(14), (15), or (16) of the Act.

g. Need for Improved Monitoring

Pursuant to 40 CFR 64.7(e), if the Permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the Illinois EPA within 30 days of identification and, if necessary, submit to the Illinois EPA a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

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Table 7.1.13a - CAM Plan for Boilers 1 and 2 - 35 IAC 212.202

PSEU Designation:	Boilers 1 and 2 (Common Stack)
Pollutant:	Particulate Matter (PM) Emissions
Indicators:	#1) Opacity
General Criteria	
The Monitoring Approach Used to Measure the Indicators:	Opacity is measured using a transmissometer. The transmissometer measures the opaqueness of the flue gas exhaust using a beam of light that traverses the stack diameter, which generates an electrical signal that is proportional to the opacity.
The Indicator Range Which Provides a Reasonable Assurance of Compliance:	An excursion is defined as an event during which a measured opacity exceeds 30 percent, based on a three-hour rolling average of COMS data, excluding those events defined as startup, shutdown or malfunction. The opacity indicator level has been established at a level that provides reasonable assurance that particulate matter emissions are in compliance when opacity is equal to or less than the indicator level.
Quality Improvement Plan (QIP) Threshold Levels:	A QIP is not being considered at the time of this CAM Plan submission. Currently, there is no indication of any deficiencies in the monitoring approach selected. The COMS monitoring requirements provide the specific QA/QC procedures for data collection, recordkeeping and reporting for determining "reasonable" assurance of compliance with the applicable PM limitation.
Performance Criteria	
The Specifications for Obtaining Representative Data:	The COMS are installed at representative locations in the exhaust stack per 40 CFR Part 60, Appendix B, PS-1 requirements.
Verification Procedures to Confirm the Operational Status of the Monitoring:	N/A. The COMS were installed and qualified for use to determine compliance with state opacity standards. Verification Procedures are not necessary.
Quality Assurance and Quality Control (QA/QC) Practices that Ensure the Validity of the Data:	40 CFR Part 60, Appendix B, Performance Specification 1 and 40 CFR Part 75 QA/QC procedures.
The Monitoring Frequency:	Opacity is measured continuously. Opacity data is reduced in accordance with procedures in 40 CFR 60.13.
The Data Collection Procedures That Will Be Used:	The three-hour rolling average is calculated and reported in the CEM Data Acquisition System. Alarm set points are established to alert operators of problems.
The Data Averaging Period For Determining Whether an Excursion Has Occurred:	Three-hour rolling averages

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Table 7.1.13b - CAM Plan for Boilers 1 and 2 - Consent Decree - Paragraph 92

PSEU Designation:	Boilers 1 and 2 (Common Stack)
Pollutant:	Particulate Matter (PM) Emissions
Indicators:	#1) Opacity
General Criteria	
The Monitoring Approach Used to Measure the Indicators:	Opacity is measured using a transmissometer. The transmissometer measures the opaqueness of the flue gas exhaust using a beam of light that traverses the stack diameter, which generates an electrical signal that is proportional to the opacity.
The Indicator Range Which Provides a Reasonable Assurance of Compliance:	An excursion is defined as an event during which a measured opacity exceeds 11 percent, based on a six-hour block average of COMS data, excluding those events defined as startup, shutdown or malfunction. The opacity indicator level has been established at a level that provides reasonable assurance that particulate matter emissions are in compliance when opacity is equal to or less than the indicator level.
Quality Improvement Plan (QIP) Threshold Levels:	A QIP is not being considered at the time of this CAM Plan submission. Currently, there is no indication of any deficiencies in the monitoring approach selected. The COMs monitoring requirements provide the specific QA/QC procedures for data collection, recordkeeping and reporting for determining "reasonable" assurance of compliance with the applicable PM limitation.
Performance Criteria	
The Specifications for Obtaining Representative Data:	The COMS are installed at representative locations in the exhaust stack per 40 CFR Part 60, Appendix B, PS-1 requirements.
Verification Procedures to Confirm the Operational Status of the Monitoring:	N/A. The COMS were installed and qualified for use to determine compliance with state opacity standards. Verification Procedures are not necessary.
Quality Assurance and Quality Control (QA/QC) Practices that Ensure the Validity of the Data:	40 CFR Part 60, Appendix B, Performance Specification 1 and 40 CFR Part 75 QA/QC procedures.
The Monitoring Frequency:	Opacity is measured continuously. Opacity data is reduced in accordance with procedures in 40 CFR 60.13.
The Data Collection Procedures That Will Be Used:	The six-hour average is calculated and reported in the CEM Data Acquisition System. Alarm set points are established to alert operators of problems.
The Data Averaging Period For Determining Whether an Excursion Has Occurred:	Six-hour block averages.

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7.2 Coal Handling Equipment

7.2.1 Description

The Permittee transfers and stores coal in a series of operations, including various conveyor belts (with associated hoppers, diverters, and transfer points), storage piles (with stackers and feeders), and silos. These operations first handle coal and then, after the crushers, coal that has been processed at the source by the coal processing equipment (See Section 7.3). Particulate matter (PM) emissions associated with these operations are controlled by various measures such as the moisture content of the coal, enclosures and covers, dust suppression, or dust collection devices.

Note: The description in Condition 7.2.1 is for informational purposes only and implies no limits or constraints.

7.2.2 List of Emission Units

Coal Transfer Conveyors
Coal Storage Piles
Coal Surge Bins
Fuel Silos (coal)

7.2.3 Applicability Provisions

- a. The "affected operations" for the purpose of these unit-specific conditions are the emission units that are used solely for the purpose of transferring coal or other solid fuel from one location to another or for storage of coal or other solid fuel, without changing the size of the fuel, e.g., by crushing or screening, as described in Conditions 7.2.1 and 7.2.2.
- b. Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected operation in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123) and Condition 7.2.4(c) (35 IAC 212.321(a)) in the event of a malfunction or breakdown of an affected operation. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to

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prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

- i. This authorization only allows such continued operation as related to the operation of the coal-fired boilers as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable repair the affected operation, remove the affected operation from service or undertake other action so that excess emissions cease.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.2.9(e) and 7.2.10(b). For this purpose, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected operation out of service.
- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such

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violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.2.4 Applicable Emission Standards

- a. The standard that addresses fugitive emissions, as defined by 35 IAC 211.2490, of the affected operations is set forth in Condition 5.2.2(a).
- b. The standard that addresses the opacity of the emission of smoke or other particulate matter from the affected operations is set forth in Condition 5.2.2(b).
- c. The affected processes listed below shall comply with 35 IAC 212.321(a): "no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of [35 IAC 212.321]." Each unit, i.e. each conveyor or surge bin, shall demonstrate compliance individually. (See also Attachment 1.) [35 IAC 212.321(a)].
 - i. Coal Transfer Conveyors
 - ii. Surge Bin with Bin Vents
 - iii. Coal Storage Silos

7.2.5 Non-Applicability of Regulations of Concern

- a. The affected operations listed below are not subject to 35 IAC 212.321 or 212.322 because of the disperse nature of the operations, as generally addressed by 35 IAC 212.323:
 - i. Coal Storage Piles
- b. The affected operations are not subject to NSPS, "Standards of Performance for Coal Preparation and Processing Plants," 40 CFR 60 Subpart Y, because the

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affected operations were not constructed, reconstructed or modified after October 24, 1974, or May 27, 2009, as applicable.

- c. The affected operations are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM because the affected operations do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.2.6 Work Practices and Emission Limitations

- a.
 - i. The Permittee shall implement and maintain the control measures for the affected operations, such as enclosure, natural surface moisture, application of dust suppressant, and use of dust collection devices, for emissions of particulate matter to support the periodic monitoring for the applicable requirements in Conditions 7.2.4 and 7.2.6(b), pursuant to Section 39.5(7)(a) of the Act.
 - ii. The control measures implemented and maintained shall be identified and operated in conformance with the "Control Measures Record" required by Condition 7.2.9(b)(i) to satisfy Condition 7.2.6(a)(i), which record is incorporated by reference into this permit by Condition 5.2.7.
- b.
 - i. PM emissions from each baghouse on the Tripper Rooms on the North and South Coal Silo Bays shall not exceed 0.33 lb/hr and 1.45 tons per year. [T1]
 - ii. The annual throughput of the coal handling equipment shall not exceed 26.28 million tons per year. [T1]
 - iii. Compliance with annual limitations in Condition 7.2.6(b)(i) shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1]

Note: The above limitations were originally established in Permit 97080088.

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7.2.7 Opacity Observations and Emission Testing Requirements

- a. i. The Permittee shall have the opacity of the emissions from the affected operations during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.
 - A. For each affected operation, observations shall be conducted every third year.
 - B. Upon written request by the Illinois EPA, such observations shall be conducted for specific affected operation(s) not later than 45 calendar days after the Permittee has received the request or on such later date agreed to by the Illinois EPA.
- ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are each not greater than 10.0 percent.
- iii. A. For each set of observations required by Conditions 7.2.7(a)(i)(A) and (B), the Permittee shall notify the Illinois EPA at least 7 days in advance of the date of the first observation(s).
 - B. The Permittee shall promptly notify the Illinois EPA of any changes in the date of the first observation(s).
- iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observation(s), if Illinois EPA personnel are present.
- v. The Permittee shall submit a written report for these observations not later than 30 days after the date of completion of each set of opacity observations required by Conditions 7.2.7(a)(i)(A) and (B). The report shall include a copy of the current Reference Method 9 certification of each observer and shall identify the observer's current employer.

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This report shall also include the following for each observation:

- A. Identification of the affected operation for which observations were conducted.
 - B. Date and time of observations.
 - C. Description of observation condition, including recent weather.
 - D. Description of the operating conditions of the affected operations.
 - E. Raw data.
 - F. Opacity determinations.
 - G. Conclusions.
- b. i. Within 90 days after the Permittee has received a written request from the Illinois EPA, the Permittee shall have the PM emissions at the stacks or vents of the affected operations, as specified in such request, measured during representative operating conditions, as set forth below, pursuant to Section 39.5(7)(d) of the Act.
- ii. A. Testing shall be conducted using appropriate Reference Methods, including Reference Method 5 or 17 for PM emissions.
- B. Compliance may be determined from the average of three valid test runs, subject to the limitations and conditions contained in 35 IAC Part 283.
- iii. The Permittee shall submit a test plan as required by Condition 8.6.2.
- iv. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of

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the test. The Illinois EPA may, at its discretion, accept notification with shorter advance notice provided that the Illinois EPA will not accept such notification if it interferes with the Illinois EPA's ability to observe the testing.

- v. The Permittee shall expeditiously submit a complete Final Report(s) for required emission testing to the Illinois EPA, no later than 90 days after the date of testing. These reports shall include the information specified in Condition 8.6.3 and a detailed description of the operating conditions of the affected operations during testing, including operating rate (tons/hr) and the control devices being used.

7.2.8 Inspection Requirements

- a. The Permittee shall perform inspections of the affected operations on at least a monthly basis to confirm compliance with the requirements of Condition 7.2.6(a). If an affected operation is not in use during an inspection, this shall be noted in the inspection record. The records required by Condition 7.2.9(d) for these inspections shall be signed off by supervisory or management personnel [Sections 39.5(7)(a) and (d) of the Act, and Construction Permit 97080088, as applicable].

Note: The origin of authority for inspections of the two baghouses on the Tripper Rooms on the North and South Coal Silo Bays are T1 conditions that originated in Construction Permit 97080088. The origin of authority for inspections of the other affected operations are Sections 39.5(7)(a) and (d) of the Act.

- b. As part of the inspections required by Condition 7.2.8(a), the Permittee shall perform observations of the affected operation(s) for visible emissions in accordance with 35 IAC 212.107 to demonstrate compliance with the requirements of Condition 7.2.4(b), unless the Permittee elects to perform Reference Method 9 observations in accordance with Condition 7.2.7(a). These observations may be scheduled so that only a number of affected operations are reviewed during each inspection,

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provided, however, that all affected operations that are in routine service shall be observed at least once during each calendar year in which it is in use. If visible emissions are observed, the Permittee shall take corrective action within 2 hours to return the status of the operations to no visible emission or shall conduct observations of opacity by Reference Method 9 within one week in accordance with Condition 7.2.7(a). If the Permittee performs Reference Method 9 observations under this Condition 7.2.8(b), such observations are not subject to the notice requirements of Conditions 7.2.7(a)(iii) through (v) [Sections 39.5(7)(a) and (d) of the Act].

- c. The Permittee shall perform inspections of the baghouses for the affected operations at least once each calendar year while the operations are out of service, with an initial inspection performed before any maintenance and repair activities are conducted and a follow-up inspection performed after any such activities are completed [Sections 39.5(7)(a) and (d) of the Act].
- d. Pursuant to 39.5(7)(b) and (d) of the Act, the Permittee shall perform a visual survey of the coal storage pile operations as follows:
 - i. Coal storage pile operations shall be visually surveyed at least twice a month between May 1st and November 30th of each calendar year.
 - ii. Coal storage pile operations shall be visually surveyed on at least a monthly basis at all other times during the calendar year.
 - iii. As part of these visual surveys, the Permittee shall perform an observation of the coal storage pile operations for visible emissions in accordance with 35 IAC 212.107 unless the Permittee elects to perform a Reference Method 9 observation. [Sections 39.5(7)(b) and (d) of the Act].
 - A. The overall duration of any observation for visible emissions shall be at least 10 minutes.
 - B. The duration of any Reference Method 9 observation shall be at least 6 minutes.

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- iv. If visible emissions from the coal storage pile are observed going beyond the property boundary or the average opacity of the Reference Method 9 observation is greater than 20% at the storage pile, the Permittee shall take action within 2 hours, if necessary, to ensure that fugitive particulate matter emissions do not exceed 30% opacity.
- v. The Permittee shall maintain records of the following for each visual survey:
 - A. Date and time the visual survey was performed and name(s) of personnel performing the visual survey.
 - B. The observed activity and condition of the coal storage pile, including the presence of any visible emissions and the recent weather conditions.
 - C. A summary of any emission control activities performed on the coal storage pile since the last visual survey.
 - D. A description of any action taken if visible emissions were observed crossing the property boundary, including whether action took place within 2 hours of the observation. The record in this Condition 7.2.8(d)(v)(D) shall be signed off by supervisory or management personnel.

7.2.9 Recordkeeping Requirements

Pursuant to Sections 39.5(7)(a) and (e) of the Act:

- a. The Permittee shall maintain records of the following for the affected operations:
 - i. Maximum operating capacity of each affected operation, (tons/hr).
 - ii. Information related to the baghouses associated with the affected operations, including available design control efficiency or performance specifications and maximum design particulate matter emissions, gr/dscf,

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with supporting information, which information shall be kept up to date.

- iii. Maintenance and repair record(s) or other records for the baghouses associated with the affected operations, which record(s) shall list the activities performed on each item of equipment or system, with date and description. (See also Condition 9.6.1, Control Equipment Maintenance Records.)
- b. i. The Permittee shall maintain a record, which shall be kept up to date to reflect any changes that the Permittee may elect to make, that contains the following for each affected operation for which a control measure(s) must be implemented and maintained pursuant to Condition 7.2.6(a)(i).
 - A. The type of emission unit (conveyor, storage pile, etc.) and the Permittee's designation for each emission unit with a description of the emission points on the emission unit;
 - B. Whether the emission unit is considered to be an "affected facility" for purposes of the NSPS, with copies of supporting documentation;
 - C. Description of the primary control measures that are utilized, with a description of the control measure and estimated frequency of application, if not continuous; and
 - D. Description of any secondary control measures that would be used based on circumstances (freezing temperatures, recent rain, dry weather, etc.) with identification of the circumstances in which they would be used and whether they would take the place of or supplement the primary control measures.
- ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the control measures identified in the record required by Condition 7.2.9(b)(i) for the fuel silos are sufficient to assure compliance with

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the emission limitations in Condition 7.2.6(b)(i) (lb/hr PM and ton PM/yr), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. This demonstration shall include results of any testing conducted pursuant to Condition 7.2.7(b), the information addressed by Condition 7.2.9(a), emission factors for uncontrolled PM emissions, and/or controlled PM emissions published by USEPA or other credible sources.

- iii. A copy of the record required by Condition 7.2.9(b)(i) shall be submitted to the Illinois EPA not later than 60 days after the effectiveness of Condition 7.2.9(b)(i). Any subsequent revisions to this record related to control measures or affected operations, including their method of operation, shall be submitted not later than 30 days after the date of the revision. Upon request by the Illinois EPA, the Permittee shall submit other relevant information related to the control measures.
- c. The Permittee shall maintain the following operating records:
 - i. The Permittee shall maintain a record of the amount of coal and other solid fuels received at the source, by type of fuel (tons/month and tons/year).
- d. The Permittee shall maintain records of the following for the inspections required by Condition 7.2.8:
 - i. Date and time the inspection was performed, name(s) of inspection personnel, and specific affected operation(s) inspected.
 - ii. The observed condition of the control measures identified in the record required by Condition 7.2.9(b)(i) for each inspected affected operation, including the presence of any visible emissions or atypical accumulations of coal fines in the vicinity of the operations.

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- iii. A description of any maintenance or repair of equipment associated with the control measures identified in the record required by Condition 7.2.9(b)(i) that is recommended as a result of the inspection and associated work order ticket number(s).
 - iv. A description of any corrective action taken if visible emissions were observed, including whether corrective action took place within 2 hours of the observation and whether the status of the process returned to no visible emissions.
- e. The Permittee shall maintain records of the following for each incident when any affected operation was in use without the control measure(s) required pursuant to the record required by Condition 7.2.9(b)(i) and each incident when an affected operation continued to operate during malfunction or breakdown with excess emissions or excess opacity as addressed by Condition 7.2.3(b):
- i. The date of the incident and identification of the affected operation(s) that was involved.
 - ii. A description of the incident, including the control measures that were not present or operated as required by the record identified in Condition 7.2.9(b)(i); other control measures that were operated, if any; the measures taken to minimize and correct deficiencies with chronology; and an explanation whether the emissions or opacity during the incident exceeded any applicable emission or opacity standard, as listed in Condition 7.2.4.
 - iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.
 - iv. The length of time after the incident was identified that the affected operations continued to operate before the control measures identified in the record required by Condition 7.2.9(b)(i) were in place or the operations were shut down (to resume operation only after such control measures were in place); an explanation of why continued

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operation was necessary; and, if this time was more than one hour, an explanation of why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.

- v. The estimated total duration of the incident, i.e., the total length of time that the affected operations ran without the control measure(s) required pursuant to the record required by Condition 7.2.9(b)(i) and the estimated amount of coal handled during the incident.
- vi. A discussion of the probable cause of the incident and any preventative measures taken.
- f. The Permittee shall keep records for all opacity observations made in accordance with Reference Method 9 for the affected operations that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.2.7 (Opacity Observations and Emission Testing Requirements) or otherwise the identity of the observer, a description of the observations that were made, the operating condition of the affected operation(s), the observed opacity, copies of the raw data sheets for the observations, and the reason for the opacity observations, e.g., Reference Method 9 opacity observations required by Condition 7.2.7(a)(i), written request by the Illinois EPA, or any required Reference Method 9 opacity observations following observations of visible emissions under Condition 7.2.8(b).
- g. To demonstrate compliance with Condition 7.2.6(b), the Permittee shall keep records of actual PM emissions from each baghouse on the Tripper Rooms on the North and South Coal Silo Bays (tons/month and tons/year), based on the records required by Condition 7.2.9(b)(ii) and 7.2.9(c).

7.2.10 Reporting Requirements

- a. Reporting of Deviations

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The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for the affected operations, as follows. Such notifications shall include a description of each deviation and a discussion of the probable cause of deviation, any corrective actions taken, and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act.

- i. For those breakdown or malfunction opacity events that require notification and reporting pursuant to Condition 7.2.10(b)(i), notification and reporting shall be provided pursuant to Condition 7.2.10(b)(i) rather than 7.2.10(a).
 - ii. Within 30 days after the conclusion of an incident in which the Permittee continued to operate an affected operation for more than 12 operating hours after discovering that emission control measures required by the record identified in Condition 7.2.9(b)(i) were not present or operating, the Permittee shall submit written notice to the Illinois EPA. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.2.9(e).
 - iii. A. Except for events and incidents for which notification or reporting is required by Condition 7.2.10(a)(ii) or 7.2.10(b)(i), as referenced in 7.2.10(a)(i), all other notifications shall be submitted with the quarterly reports required by Condition 7.2.10(b)(ii).

B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in prior notifications and reports for such deviations.
- b. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns

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Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA for incidents when operation of affected operation(s) continued with excess emissions or excess opacity during malfunction or breakdown as addressed by Condition 7.2.3(b).

- i. A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile or electronic mail, for each incident in which the opacity from an affected operation exceeds 30 percent for eight or more 6-minute averaging periods within a two hour period unless the Permittee has begun the shutdown by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.2.10(b)(ii).)
- B. Upon conclusion of each incident that is two hours or more in duration, the Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a copy of the records for the incident required by Condition 7.2.9(e).
- ii. The Permittee shall submit quarterly reports to the Illinois EPA that include the following information for incidents during the quarter in which affected operations continued to operate during malfunction or breakdown with excess emissions or excess opacity. These reports shall be submitted with the quarterly reports submitted for the coal-fired boiler pursuant to Condition 7.1.10-2(a).
 - A. A listing of such incidents, in chronological order, that includes:
 - I. The date, time, and duration of each incident;

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- II. The identity of the affected operation(s) involved in the incident; and
- III. Whether a follow-up notice was submitted for the incident pursuant to Condition 7.2.10(b)(i)(B), with the date of the notice.

- B. A description of the incident, discussion of probable cause of the incident, corrective actions taken, and any preventative measures taken; provided, however, that the Permittee need not resubmit information provided in a prior report for an incident, as identified above, but may elect to supplement the prior submittal.
- C. The sum duration of all incidents during the quarter.
- D. If there have been no such incidents during the calendar quarter, this shall be stated in the report.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational changes with respect to the affected operations without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, or for an activity for which a permit is required pursuant to 35 IAC 201.142.

- a. Handling of solid fuels other than coal.
- b. Operation of additional dust suppressant systems.
- c. Operation of additional dust collection equipment.
- d. Operation of replacement dust suppression systems or dust collection equipment that is of equal or greater effectiveness in controlling visible

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emissions than the device(s) being replaced, as recognized in a Construction Permit for such system or equipment.

7.2.12 Compliance Procedures

- a. Compliance with Condition 7.2.4 is addressed by the observations, inspections, and recordkeeping required by Conditions 7.2.7(a), 7.2.8, and 7.2.9, respectively.
- b. Compliance with Condition 7.2.6(a) is addressed by the inspections and recordkeeping required by Conditions 7.2.8, and 7.2.9, respectively.
- c. Compliance with Condition 7.2.6(b) is addressed by the testing, inspections and recordkeeping required by Conditions 7.2.7(b), 7.2.8, and 7.2.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

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7.3 Coal Processing Equipment

7.3.1 Description

The Permittee prepares or processes coal for use as fuel in its boilers with crushers that reduce the size of the coal. Associated particulate matter (PM) emissions are controlled by various control measures such as moisture content of the coal, enclosures, dust suppression, and dust collection equipment.

Note: The description in Condition 7.3.1 is for informational purposes only and implies no limits or constraints.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Emission Control Equipment/Measures
Coal Crusher	Enclosures, Moisture Content of Coal, Dust Suppression, and Dust Collection Equipment

7.3.3 Applicability Provisions

- a.
 - i. An "affected process" for the purpose of these unit-specific conditions is an individual process emission unit that prepares coal for use as a fuel by crushing the coal as described in Conditions 7.3.1 and 7.3.2.
 - ii. Certain affected processes, as follows, for which construction, modification, or reconstruction, commenced after October 24, 1974 but prior to April 28, 2008 are also "affected facilities" for purposes of the New Source Performance Standards (NSPS) for Coal Preparation Plants, 40 CFR 60 Subpart Y, pursuant to 40 CFR 60.250(a) and (b), and 60.251. This is because this source processes more than 200 tons per day of coal by breaking or crushing. These affected facilities are subject to applicable requirements of the NSPS, 40 CFR 60 Subpart Y and related requirements in the NSPS, 40 CFR 60 Subpart A, General Provisions.
 - A. Coal crushers.

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Note: See Condition 7.3.4(d) for the certain affected processes subject to NSPS Subpart Y.

- b. Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected process in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123) and Condition 7.3.4(c) (35 IAC 212.321) in the event of a malfunction or breakdown of an affected process. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.
 - i. This authorization only allows such continued operation as related to the operation of the coal-fired boilers as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
 - ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable repair the affected process, remove the affected process from service or undertake other actions so that excess emissions cease.
 - iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.3.9(d) and 7.3.10(b). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected process out of service.

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- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.3.4 Applicable Emission Standards

- a. The standard that addresses fugitive emissions, as defined by 35 IAC 211.2490, of the affected processes is set forth in Condition 5.2.2(a).
- b. The standard that addresses the opacity of the emission of smoke or other particulate matter from the affected processes is set forth in Condition 5.2.2(b).
- c. The affected processes shall comply with 35 IAC 212.321(a): "no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of [35 IAC 212.321]." Each unit, i.e. each coal crusher, shall demonstrate compliance individually. (See also Attachment 1.) [35 IAC 212.321(a)].
- d. The affected processes that are also affected facilities subject to the NSPS, 40 CFR 60 Subpart Y, are the coal crushers 1W and 2W. Those affected

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processes shall not discharge gases which exhibit 20 percent opacity or greater into the atmosphere, except during periods of startup, shutdown and malfunction, as defined in 40 CFR 60.2, pursuant to 40 CFR 60.11(c) and 60.254(a).

7.3.5 Non-Applicability of Regulations of Concern

- a. The affected processes are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM because the affected operations do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.3.6 Work Practices

- a.
 - i. The Permittee shall implement and maintain the control measures for the affected processes, such as enclosure, natural surface moisture, application of dust suppressant, and use of dust collection devices, for emissions of particulate matter to support the periodic monitoring for the applicable requirements in Condition 7.3.4, pursuant to Section 39.5(7)(a) of the Act.
 - ii. The control measures implemented and maintained shall be identified and operated in conformance with the "Control Measures Record" required by Condition 7.3.9(b)(i) to satisfy Condition 7.3.6(a)(i), which record is incorporated by reference into this permit by Condition 5.2.7.
 - iii. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate each affected process that is subject to the NSPS in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or the USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and

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maintenance procedures, and inspection of the source [40 CFR 60.11(d)].

7.3.7 Opacity Observations and Emission Testing Requirements

- a. i. The Permittee shall have the opacity of the emissions from the affected processes during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.
 - A. For each affected process, observations shall be conducted every third year.
 - B. Upon written request by the Illinois EPA, such observations shall be conducted for specific affected process(es) not later than 45 calendar days after the Permittee received the request or on such later date agreed to by the Illinois EPA.
- ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are each not greater than 10.0 percent.
- iii. A. For each set of observations required by Conditions 7.3.7(a)(i)(A) and (B), the Permittee shall notify the Illinois EPA at least 7 days in advance of the date of the first observation(s).
 - B. The Permittee shall promptly notify the Illinois EPA of any changes in the date of the first observation(s).
- iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observation(s), if Illinois EPA personnel are present.
- v. The Permittee shall submit a written report for these observations not later than 30 days after the date of completion of each set of opacity observations required by Conditions 7.3.7(a)(i)(A) and (B). The report shall

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include a copy of the current Reference Method 9 certification of each observer and shall identify the observer's current employer. This report shall also include the following for each observation:

- A. Identification of the affected process for which observations were conducted.
 - B. Date and time of observations.
 - C. Description of observation conditions, including recent weather.
 - D. Description of the operating conditions of the affected processes.
 - E. Raw data.
 - F. Opacity determinations.
 - G. Conclusions.
- b. i. Within 90 days after the Permittee has received a written request from the Illinois EPA, the Permittee shall have the PM emissions at the stacks or vents of the affected processes, as specified in such request, measured during representative operating conditions, as set forth below, pursuant to Section 39.5(7)(d) of the Act.
- ii. A. Testing shall be conducted using appropriate Reference Methods, including Method 5 or 17 for PM emissions.
- B. Compliance may be determined from the average of three valid test runs, subject to the limitations and conditions contained in 35 IAC Part 283.
- iii. The Permittee shall submit a test plan as required by Condition 8.6.2.
- iv. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected

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time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may, at its discretion, accept notification with shorter advance notice provided that the Illinois EPA will not accept such notification if it interferes with the Illinois EPA's ability to observe the testing.

- v. The Permittee shall expeditiously submit a complete final report(s) for required emission testing to the Illinois EPA, no later than 90 days after the date of testing. These reports shall include the information specified in Condition 8.6.3 and a detailed description of the operating conditions of the affected operations during testing, including operating rate (tons/hr) and the control devices being used.

7.3.8 Inspection Requirements

- a. The Permittee shall perform inspections of the affected processes on at least a monthly basis to confirm compliance with the requirements of Condition 7.3.6(a). If an affected process is not in operation during an inspection, this shall be noted in the inspection record. The records required by Condition 7.3.9(c) for these inspections shall be signed off by supervisory or management personnel [Sections 39.5(7)(a) and (d) of the Act].
- b. As part of the inspections of Condition 7.3.8(a), the Permittee shall perform observations of the affected processes for visible emissions in accordance with 35 IAC 212.107 to demonstrate compliance with the requirements of Condition 7.3.4(b), unless the Permittee elects to perform Reference Method 9 observations in accordance with Condition 7.3.7(a). These observations may be scheduled so that only a number of affected processes are reviewed during each inspection, provided, however, that all affected processes that are in routine service shall be observed at least once during each calendar year in which it is operating. If visible emissions are observed, the Permittee shall take corrective action within 2 hours to return the status of the process to no visible emission or shall conduct observations of opacity by Reference Method 9 within one week in

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accordance with Condition 7.3.7(a). If the Permittee performs Reference Method 9 observations under this Condition 7.3.8(b), such observations are not subject to the notice requirements of Conditions 7.3.7(a)(iii) through (v) [Sections 39.5(7)(a) and (d) of the Act].

- c. The Permittee shall perform inspections of the baghouses for affected processes at least once each calendar year while the processes are out of service, with an initial inspection performed before any maintenance and repair activities are conducted and a follow-up inspection performed after any such activities are completed [Sections 39.5(7)(a) and (d) of the Act].

7.3.9 Recordkeeping Requirements

Pursuant to Sections 39.5(7)(a) and (e) of the Act:

- a. The Permittee shall maintain records of the following for the affected processes:
 - i. Maximum operating capacity of each affected process, (tons/hr).
 - ii. Information related to the baghouses associated with the affected processes, including the available design control efficiency or performance specifications and maximum design particulate matter emissions, gr/dscf., with supporting information, which information shall be kept up to date.
 - iii. Maintenance and repair record(s) or other records for the baghouses associated with the affected processes, which record(s) shall list the activities performed on each item of equipment or system, with date and description. (See also Condition 9.6.1, Control Equipment Maintenance Records.)
- b. i. The Permittee shall maintain a record, which shall be kept up to date to reflect any changes that the Permittee may elect to make, that contains the following for each affected process for which a control measure(s) must be implemented and maintained pursuant to Condition 7.3.6(a)(i).

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- A. The type of emission unit (crushers, etc.) and the Permittee's designation for each emission unit with a description of the emission points on the emission unit;
 - B. Whether the emission unit is considered to be an "affected facility" for purposes of the NSPS, with copies of supporting documentation;
 - C. Description of the primary control measures that are utilized, with a description of the control measure and estimated frequency of application, if not continuous; and
 - D. Description of any secondary control measures that would be used based on circumstances (freezing temperatures, recent rain, dry weather, etc.) with identification of the circumstances in which they would be used and whether they would take the place of or supplement the primary control measures.
- ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the control measures identified in the record required by Condition 7.3.9(b)(i) are sufficient to assure compliance with Condition 7.3.4(c) at the maximum process weight rate at which each affected process can be operated (tons coal/hour), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. This demonstration shall include results of any testing conducted pursuant to Condition 7.3.7(b), the information addressed by Condition 7.3.9(a), emission factors for uncontrolled PM emissions, and/or controlled PM emissions published by USEPA or other credible sources.
 - iii. A copy of the record required by Condition 7.3.9(b)(i) shall be submitted to the Illinois EPA not later than 60 days after the effectiveness of Condition 7.3.9(b)(i). Any subsequent revisions to this record related to control measures or affected processes,

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including their method of operation, shall be submitted not later than 30 days after the date of the revision. Upon request by the Illinois EPA, the Permittee shall submit other relevant information related to the control measures.

- c. The Permittee shall maintain records of the following for the inspections required by Condition 7.3.8:
 - i. Date and time the inspection was performed, name(s) of inspection personnel, and specific affected process(es) inspected.
 - ii. The observed condition of the control measures identified in the record required by Condition 7.3.9(b)(i), for each inspected affected process(es), including the presence of any visible emissions or atypical accumulations of coal fines in the vicinity of the process.
 - iii. A description of any maintenance or repair of equipment associated with control measures identified in the record required by Condition 7.3.9(b)(i) that is recommended as a result of the inspection and associated work order ticket number(s).
 - iv. A description of any corrective action taken if visible emissions were observed, including whether corrective action took place within 2 hours of the observation and whether the status of the process returned to no visible emissions.
- d. The Permittee shall maintain records of the following for each incident when any affected process operated without the control measure(s) required pursuant to the record required by Condition 7.3.9(b)(i) and each incident when an affected process continued to operate during malfunction or breakdown with excess emissions or excess opacity as addressed by Condition 7.3.3(b):
 - i. The date of the incident and identification of the affected process(es) that was involved.
 - ii. A description of the incident, including the control measures that were not present or

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operated as required by the record identified in Condition 7.3.9(b)(i); other control measures that were operated, if any; the measures taken to minimize and correct deficiencies with chronology; and an explanation whether the emissions or opacity during the incident exceeded any applicable emission or opacity standard, as listed in Condition 7.3.4.

- iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.
- iv. The length of time after the incident was identified that the affected processes continued to operate before the control measures identified in the record required by Condition 7.3.9(b)(i) were in place or the processes were shut down (to resume operation only after such control measures were in place); an explanation of why continued operation was necessary; and, if this time was more than one hour, an explanation of why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.
- v. The estimated total duration of the incident, i.e., the total length of time that the affected processes ran without the control measure(s) required pursuant to the record required by Condition 7.3.9(b)(i) and the estimated amount of coal handled during the incident.
- vi. A discussion of the probable cause of the incident and any preventative measures taken.
- e. The Permittee shall keep records for all opacity observations made in accordance with Reference Method 9 for the affected processes that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.3.7 (Opacity and Emission Testing Requirements) or otherwise the identity of the observer, a description of the observations that were made, the

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operating condition of the affected process(es), the observed opacity, copies of the raw data sheets for the observations, and the reason for the opacity observations, e.g., Reference Method 9 opacity observations required by Condition 7.3.7(a)(i), written request by the Illinois EPA, or any required Reference Method 9 opacity observations following observations of visible emissions under Condition 7.3.8(b).

7.3.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for the affected processes, as follows. Such notifications shall include a description of each deviation and a discussion of the probable cause of deviation, any corrective actions taken, and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act.

- i. For those breakdown or malfunction opacity events that require notification and reporting pursuant to Condition 7.3.10(b)(i), notification and reporting shall be provided pursuant to Condition 7.3.10(b)(i) rather than 7.3.10(a).
- ii. Within 30 days after the conclusion of an incident in which the Permittee continued to operate an affected process for more than 12 operating hours after discovering that emission control measures required by the record identified in Condition 7.3.9(b)(i) were not present or operating, the Permittee shall submit written notice to the Illinois EPA. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.3.9(d).
- iii. A. Except for events and incidents for which notification or reporting is required by Condition 7.3.10(a)(ii) or 7.3.10(b)(i), as referenced in 7.3.10(a)(i), all other notifications shall be submitted with the quarterly reports required by Condition 7.3.10(b)(ii).

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- B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in prior notifications and reports for such deviations.
- b. Reporting When Continued Operation Occurred During Malfunctions And Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA for incidents when operation of affected process(es) continued with excess emissions or excess opacity during malfunction or breakdown as addressed by Condition 7.3.3(b).
 - i. A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile, or electronic mail, for each incident in which the opacity from an affected process exceeds 30 percent for eight or more 6-minute averaging periods within a two hour period unless the Permittee has begun the shutdown by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.3.10(b)(ii).)
 - B. Upon conclusion of each incident that is two hours or more in duration, the Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a copy of the records for the incident required by Condition 7.3.9(d).
 - ii. The Permittee shall submit quarterly reports to the Illinois EPA that include the following information for incidents during the quarter in which affected processes continued to

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operate during malfunction or breakdown with excess emissions or excess opacity. These reports shall be submitted with the quarterly reports submitted for the coal-fired boiler pursuant to Condition 7.1.10-2(a).

- A. A listing of such incidents, in chronological order, that includes:
 - I. The date, time, and duration of each incident;
 - II. The identity of the affected process(es) involved in the incident; and
 - III. Whether a follow-up notice was submitted for the incident pursuant to Condition 7.3.10(b)(i)(B), with the date of the notice.
- B. A description of the incident, discussion of probable cause of the incident, corrective actions taken, and any preventative measures taken; provided, however, that the Permittee need not resubmit information provided in a prior report for an incident, as identified above, but may elect to supplement the prior submittal.
- C. The sum duration of all incidents during the quarter.
- D. If there have been no such incidents during the calendar quarter, this shall be stated in the report.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational changes with respect to the affected processes without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (1) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, or for an

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activity for which a permit is required pursuant to 35 IAC 201.142.

- a. Handling of solid fuels other than coal.
- b. Operation of additional dust suppressant systems.
- c. Operation of additional dust collection equipment.
- d. Operation of replacement dust suppression systems or dust collection equipment that is of equal or greater effectiveness in controlling visible emissions than the device(s) being replaced as recognized in a Construction Permit for such system or equipment.

7.3.12 Compliance Procedures

- a. Compliance with Condition 7.3.4 is addressed by the observations, inspections, and recordkeeping required by Conditions 7.3.7(a), 7.3.8, and 7.3.9, respectively.
- b. Compliance with Condition 7.3.6 is addressed by the inspections and recordkeeping required by Conditions 7.3.8 and 7.3.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

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7.4 Fly Ash Handling Equipment

7.4.1 Description

The Permittee operates a fly ash removal system that handles and stores fly ash collected at the coal-fired boilers. Associated particulate matter (PM) emissions are controlled by measures such as enclosures.

Construction Permit 13050042 authorized a change in the method of operation of two fly ash secondary collection systems (Units SC-3 and SC-4), with routine operation of these systems. This change facilitated handling the increased volume of particulate captured by the ESPs, which now includes DSI sorbent material in addition to the fly ash from the two coal-fired boilers. Systems SC-3 and SC-4 will now be used in addition to the existing fly ash handling and load-out operations at this source. SC-3 and SC-4 previously served as "spares" and were not operated routinely. Ash and sorbent transported by these systems are captured by filter-separator units.

Note: The description in Condition 7.4.1 is for informational purposes only and implies no limits or constraints.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Control Equipment/Measures
Pneumatic Transfer System, Silos w/ Bin Vents, and Loadout Operation	Enclosures

7.4.3 Applicability Provisions

- a. An "affected process" for the purpose of these unit-specific conditions, is an individual process emission unit as described in Conditions 7.4.1 and 7.4.2.
- b. Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected process in violation of the applicable standards identified or cross-referenced in Condition 7.4.4(b) (35 IAC 212.123) and Condition 7.4.4(c) (35 IAC 212.321(a)) in the event of a malfunction or breakdown of an affected process.

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This authorization is provided pursuant to 35 IAC 201.149, 201.261, and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

- i. This authorization only allows such continued operation as related to the operation of the coal-fired boilers as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable repair the affected process, remove the affected process from service, or undertake other action so that excess emissions cease.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.4.9(e) and 7.4.10(b). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected process out of service.
- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- v. This authorization does not relieve the Permittee from the continuing obligation to

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minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.4.4 Applicable Emission Standards

- a. The standard that addresses fugitive emissions, as defined by 35 IAC 211.2490, of the affected processes is set forth in Condition 5.2.2(a).
- b. The standard that addresses the opacity of the emission of smoke or other particulate matter from the affected processes is set forth in Condition 5.2.2(b).
- c. The affected processes shall comply with 35 IAC 212.321(a): "no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of [35 IAC 212.321]." Each unit, i.e. each pneumatic transfer system, shall demonstrate compliance individually. (See also Attachment 1.) [35 IAC 212.321(a)].

7.4.5 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected processes not being subject to the New Source Performance Standards (NSPS) for Nonmetallic Mineral Processing Plants, 40 CFR Part 60, Subparts A and OOO, because the affected processes do not meet the definition of a nonmetallic mineral processing plant because there is no equipment used to crush or grind ash.

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- b. The affected processes are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM because the affected processes do not use add on controls to achieve compliance with any applicable emission limitation.

7.4.6 Work Practices

- a.
 - i. The Permittee shall implement and maintain the control measures for the affected processes, such as enclosure, for emissions of particulate matter to support the periodic monitoring for the applicable requirements in Condition 7.4.4, pursuant to Section 39.5(7)(a) of the Act.
 - ii. The control measures implemented and maintained shall be identified and operated in conformance with the "Control Measures Record" required by Condition 7.4.9(b)(i) to satisfy Condition 7.4.6(a)(i), which record is incorporated by reference into this permit by Condition 5.2.7.

7.4.7 Opacity Observations

- a.
 - i. The Permittee shall have the opacity of the emissions from the affected processes during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7)(b) of the Act.
 - A. For each affected process, observations shall be conducted every third year.
 - B. Upon written request by the Illinois EPA, such observations shall be conducted for specific affected process(es) not later than 45 calendar days after the Permittee has received the request or such later date agreed to by the Illinois EPA.
 - ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are each not greater than 10.0 percent.

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- iii. A. For each set of observations required by Conditions 7.4.7(a)(i)(A) and (B), the Permittee shall notify the Illinois EPA at least 7 days in advance of the date of the first observation(s).
- B. The Permittee shall promptly notify the Illinois EPA of any changes in the date of the first observation(s).
- iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observation(s), if Illinois EPA personnel are present.
- v. The Permittee shall submit a written report for these observations not later than 30 days after the date of completion of each set of opacity observations required by Conditions 7.4.7(a)(i)(A) and (B). The report shall include a copy of the current Reference Method 9 certification of each observer and shall identify the observer's current employer. This report shall also include the following for each observation:
 - A. Identification of the affected process for which observations were conducted.
 - B. Date and time of observations
 - C. Description of observation condition, including recent weather.
 - D. Description of the operating conditions of the affected processes.
 - E. Raw data.
 - F. Opacity determinations.
 - G. Conclusions.

7.4.8 Inspection Requirements

- a. The Permittee shall perform inspections as follows to confirm compliance with the requirements of Condition 7.4.6(a) [Sections 39.5(7)(a) and (d) of the Act].

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- i. Affected processes other than loadout operations shall be inspected on at least a monthly basis.
 - ii. Affected loadout operations shall be inspected on at least a weekly basis.
 - iii. If an affected process is not in operation during an inspection, this shall be noted in the inspection record.
 - iv. The records required by Condition 7.4.9(d) for these inspections shall be signed off by supervisory or management personnel.
- b. As part of the inspections of Condition 7.4.8(a), the Permittee shall perform observations of the affected processes for visible emissions in accordance with 35 IAC 212.107 to demonstrate compliance with the requirements of Condition 7.4.4(b), unless the Permittee elects to perform Reference Method 9 observations in accordance with Condition 7.4.7(a). These observations may be scheduled so that only a number of affected processes are reviewed during each inspection, provided, however, that all affected processes that are in routine service shall be observed at least once during each calendar year in which it is operating other than loadout operations which shall each be observed at least once during each calendar quarter in which it is operating [Sections 39.5(7)(b) and (d) of the Act].
- c. If visible emissions are observed, the Permittee shall take corrective action within 2 hours to return the status of the process to no visible emission or shall conduct observations of opacity by Reference Method 9 within one week in accordance with Condition 7.4.7(a). If the Permittee performs Reference Method 9 observations under this Condition 7.4.8(b), such observations are not subject to the notice requirements of Condition 7.4.7(a)(iii) through (v) [Sections 39.5(7)(b) and (d) of the Act].

7.4.9 Recordkeeping Requirements

Pursuant to Sections 39.5(7)(a) and (e) of the Act:

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- a. The Permittee shall keep a record of the maximum operating capacity of each affected process (tons/hour).
- b. i. The Permittee shall maintain a record, which shall be kept up to date to reflect any changes that the Permittee may elect to make, that contains the following for each affected process for which a control measure(s) must be implemented and maintained pursuant to Condition 7.4.6(a)(i).
 - A. The type of emission unit (pneumatic transfer system, silos etc.) and the Permittee's designation for each emission unit with a description of the emission points on the emission unit;
 - B. Description of the primary control measures that are utilized, with a description of the control measure and estimated frequency of application, if not continuous; and
 - C. Description of any secondary control measures that would be used based on circumstances (freezing temperatures, recent rain, dry weather, etc.) with identification of the circumstances in which they would be used and whether they would take the place of or supplement the primary control measures.
- ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the control measures identified in the record required by Condition 7.4.9(b)(i) are sufficient to assure compliance with Condition 7.4.4(c) at the maximum process weight rate at which each affected process can be operated (tons fly ash/hour), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. This demonstration shall include the information addressed by Condition 7.4.9(a), emission factors for uncontrolled PM emissions, and/or controlled PM emissions published by USEPA or other credible sources.

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- iii. A copy of the record required by Condition 7.4.9(b)(i) shall be submitted to the Illinois EPA not later than 60 days after the effectiveness of Condition 7.4.9(b)(i). Any subsequent revisions to this record related to control measures or affected processes, including their method of operation, shall be submitted not later than 30 days after the date of the revision. Upon request by the Illinois EPA, the Permittee shall submit other relevant information related to the control measures.
- c. The Permittee shall maintain records of the amount of fly ash handled by the affected processes (tons/month and tons/year).
- d. The Permittee shall maintain records of the following for the inspections required by Condition 7.4.8:
 - i. Date and time the inspection was performed, name(s) of inspection personnel, and specific affected process(es) inspected.
 - ii. The observed condition of the control measures identified in the record required by Condition 7.4.9(b)(i) for each inspected affected process, including the presence of any visible emissions or atypical accumulations of fly ash in the vicinity of the process.
 - iii. A description of any maintenance or repair of equipment associated with control measures identified in the record required by Condition 7.4.9(b)(i) that is recommended as a result of the inspection and associated work order ticket number(s).
 - iv. A description of any corrective action taken if visible emissions were observed, including whether corrective action took place within 2 hours of the observation and whether the status of the process returned to no visible emissions.
- e. The Permittee shall maintain records of the following for each incident when any affected process operated without the control measure(s) required pursuant to the record required by

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Condition 7.4.9(b)(i) and each incident when an affected process continued to operate during malfunction or breakdown with excess emissions or excess opacity as addressed by Condition 7.4.3(b):

- i. The date of the incident and identification of the affected process(es) that was involved.
- ii. A description of the incident, including the control measure(s) that was not present or operated as required by the record identified in Condition 7.4.9(b)(i); other control measures that were operated, if any; the measures taken to minimize and correct deficiencies with chronology; and an explanation whether the emissions or opacity during the incident exceeded any applicable emission or opacity standard, as listed in Condition 7.4.4.
- iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.
- iv. The length of time after the incident was identified that the affected processes continued to operate before the control measures identified in the record required by Condition 7.4.9(b)(i) were in place or the processes were shut down (to resume operation only after established control measures were in place); an explanation of why continued operation was necessary; and, if this time was more than one hour, an explanation of why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.
- v. The estimated total duration of the incident, i.e., the total length of time that the affected processes ran without the control measure(s) required pursuant to the record required by Condition 7.4.9(b)(i) and the estimated amount of fly ash handled during the incident.
- vi. A discussion of the probable cause of the incident and any preventative measures taken.

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- f. The Permittee shall keep records for all opacity observations made in accordance with Reference Method 9 for the affected processes that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.4.7 (Opacity Observations Requirements), or otherwise the identity of the observer, a description of the observations that were made, the operating condition of the affected process(es), the observed opacity, copies of the raw data sheets for the observations, and the reason for the opacity observations, e.g., Reference Method 9 opacity observations required by Condition 7.4.7(a)(i), written request by the Illinois EPA, or any required Reference Method 9 opacity observations following observations of visible emissions under Condition 7.4.8(b).

7.4.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for the affected processes, as follows. Such notifications shall include a description of each deviation and a discussion of the probable cause of deviation, any corrective actions taken, and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act.

- i. For those breakdown or malfunction PM and opacity events that require notification and reporting pursuant to Condition 7.4.10(b)(i), notification and reporting shall be provided pursuant to Condition 7.4.10(b)(i) rather than 7.4.10(a).
- ii. Within 30 days after the conclusion of an incident in which the Permittee continued to operate an affected process for more than 12 operating hours after discovering that emission control measures required by the record identified in Condition 7.4.9(b)(i) were not present or operating, the Permittee shall submit written notice to the Illinois EPA. Such notifications shall be accompanied

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by a copy of the records for the incident required by Condition 7.4.9(e).

iii. A. Except for events and incidents for which notification or reporting is required by Condition 7.4.10(a)(ii) or 7.4.10(b)(i), as referenced in 7.4.10(a)(i), all other notifications shall be submitted with the quarterly reports required by Condition 7.4.10(b)(ii).

B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in prior notifications and reports for such deviations.

b. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA for incidents when operation of an affected process(es) continued with excess emissions or excess opacity during malfunction or breakdown as addressed by Condition 7.4.3(b).

i. A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile or electronic mail, for each incident in which the opacity from an affected process exceeds 30 percent for eight or more 6-minute averaging periods within a two hour period unless the Permittee has begun the shutdown by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.4.10(b)(ii).)

B. Upon conclusion of each incident that is two hours or more in duration, the

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Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a copy of the records for the incident required by Condition 7.4.9(e).

- ii. The Permittee shall submit quarterly reports to the Illinois EPA that include the following information for incidents during the quarter in which affected processes continued to operate during malfunction or breakdown with excess emissions or excess opacity. These reports shall be submitted with the quarterly reports submitted for the coal-fired boiler pursuant to Condition 7.1.10-2(a).
 - A. A listing of such incidents, in chronological order, that includes:
 - I. The date, time, and duration of each incident;
 - II. The identity of the affected process(es) involved in the incident; and
 - III. Whether a follow-up notice was submitted for the incident pursuant to Condition 7.4.10(b)(i)(B), with the date of the notice.
 - B. A description of the incident, discussion of probable cause of the incident, corrective actions taken, and any preventative measures taken; provided, however, that the Permittee need not resubmit information provided in a prior report for an incident, as identified above, but may elect to supplement the prior submittal.
 - C. The sum duration of all incidents during the quarter.
 - D. If there have been no such incidents during the calendar quarter, this shall be stated in the report.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

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Section 7.4 - Fly Ash Handling Equipment

The Permittee is authorized to make the following physical or operational changes with respect to the affected processes without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, or for an activity for which a permit is required pursuant to 35 IAC 201.142.

- a. Operation of additional dust control measures.
- b. Operation of replacement dust control measures that are of equal or greater effectiveness in controlling visible emissions than the measures being replaced, as recognized in a Construction Permit for such measures.

7.4.12 Compliance Procedures

- a. Compliance with Condition 7.4.4 is addressed by the observations, inspections, and recordkeeping required by Conditions 7.4.7(a), 7.4.8, and 7.4.9, respectively.
- b. Compliance with Condition 7.4.6 is addressed by the inspections and recordkeeping required by Conditions 7.4.8 and 7.4.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

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 Section 7.5 - Auxiliary Boiler

7.5 Auxiliary Boiler

7.5.1 Description

The boiler is used to provide heat for the plant. This boiler, which was built in 1984, has a nominal capacity of 175 mmBtu/hr. The boiler is also used to generate steam for certain startups of the coal-fired boilers. It is not used to directly generate electricity. The boiler is fueled by natural gas only and is equipped with a continuous oxygen trim system that maintains an optimum air to fuel ratio.

Note: The description in Condition 7.5.1 is for informational purposes only and implies no limits or constraints.

7.5.2 List of Emission Units and Air Pollution Control Equipment

Unit	Description	Control Equipment
Auxiliary Boiler BLR3	Natural Gas-Fired Boiler	None

7.5.3 Applicability Provisions

- a. The "affected boiler" for the purpose of these unit-specific conditions, is the boiler described in Conditions 7.5.1 and 7.5.2.
- b. Because the boiler is located at, or is part of, a major source of HAP, the affected boiler is also an affected source under the federal NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD. As an affected source, the Permittee must comply with applicable requirements of the NESHAP, 40 CFR Part 63, Subpart DDDDD, and related requirements of 40 CFR 63, Subpart A, General Provisions, for the affected boiler. The affected boiler is an existing boiler designed to burn gas 1 fuels, in the subcategory specified at 40 CFR 63.7499(1).

7.5.4 Applicable Emission Standards

- a. The standard that addresses the opacity of the emission of smoke or other particulate matter from

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the affected boiler is set forth in Condition 5.2.2(b).

- b. The emissions of CO from the affected boiler shall not exceed 200 ppm, corrected to 50 percent excess air, pursuant to 35 IAC 216.121.

7.5.5 Non-Applicability of Regulations of Concern

- a. The affected boiler is not subject to 35 IAC 217.121, because the design heat input capacity of the affected boiler is less than 250 mmBtu/hr.
- b. The affected boiler is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources because the affected boiler does not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels for all criteria pollutants.
- c. Pursuant to 40 CFR 63.7500(e), the affected boiler is not subject to the emission limits in Tables 1 and 2 to 40 CFR 63 Subpart DDDDD, or the operating limits in Table 4 to 40 CFR 63 Subpart DDDDD.

7.5.6 Work Practices and Operational Limitations

- a. As part of its operation and maintenance of the affected boiler, the Permittee shall perform a combustion evaluation on the affected boiler in each calendar year in which the boiler is operated, unless a tune-up is performed in that calendar year in accordance with Condition 7.5.6(b), pursuant to Section 39.5(7)(d) of the Act. This evaluation shall consist of process measurements of the concentration of CO in the flue gas of the affected boiler, as well as any adjustments and/or corrective measures undertaken for the combustion systems of the boiler.
- b. Pursuant to 40 CFR 63.7540(a)(12), the Permittee shall conduct a tune-up of the affected boiler every five years as specified in 40 CFR 63.7540, according to the schedule specified in 40 CFR 63.7515(d).
- c. Pursuant to Section 39.5(7) of the Act, natural gas shall be the only fuel fired in the affected boiler.

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- d. Pursuant to 40 CFR 63.7500(a)(3), at all times, the Permittee shall operate and maintain the affected boiler (as defined in 40 CFR 63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

7.5.7 Opacity Observation Requirements

- a. The Permittee shall have the opacity of the exhaust from the affected boiler during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.
 - i. On an annual basis, unless the boiler operates for less than 500 hours in the calendar year. For this purpose, opacity testing shall first be conducted within the first 500 hours of operation of the boiler after the effectiveness of this Condition 7.5.7(a).
 - ii. Upon written request by the Illinois EPA, such testing shall be conducted within 45 calendar days of the request, or on the date that the affected boiler next operates, or on the date agreed upon by the Illinois EPA, whichever is later.
- b. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are each not greater than 10.0 percent.
- c. For each set of observations required by Conditions 7.5.7(a)(i) and (ii), the Permittee shall notify the Illinois EPA at least 5 days in advance of the date of the first observations. This notification shall include the name and employer of the observer(s) and identify any concerns for successful completion of observations, i.e., lack of suitable point for proper observation or inability to conduct observations under specified operating conditions. This condition supersedes the requirements of Condition 8.6.2.

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- d. The Permittee shall promptly notify the Illinois EPA of any changes in the date of the observations.
- e. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observations, if Illinois EPA personnel are present.
- f. The Permittee shall submit a written report for this testing within 15 days of the date of testing. This report shall include relevant information specified in Condition 8.6.3 and the following information:
 - i. Summary of results.
 - ii. Name of certified observer(s), copy of their current certification(s), and name of employer.
 - iii. Description of observation location and meteorological conditions.
 - iv. Detailed description of the operating conditions of the affected boiler during the observations, including fuel consumption (scf/hr) and firing rate (mmBtu/hr).

7.5.8 Intentionally Blank.

7.5.9 Recordkeeping Requirements

The Permittee shall maintain the following records for the affected boiler, pursuant to Sections 39.5(7)(a) and (e) of the Act:

- a. Operating records, which shall include the following information:
 - i. Information documenting the performance of the combustion evaluations required by Condition 7.5.6(a), including the date of the evaluation, the concentrations of CO measured at the start and conclusion of the evaluation, and a description of any adjustments and preventative and corrective measures undertaken for the combustion systems of the boiler.
- b. i. Records of gas usage for the affected boiler in scf/month and scf/year.

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- ii. Records of operating hours (hours/calendar year).
- c. Records for all opacity measurements made in accordance with Reference Method 9 for the affected boiler that the Permittee conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the identity of the observer, a description of the various observations that were made, the observed opacity, and copies of the raw data sheets for the observations.
- d. Pursuant to 40 CFR 63.7540(a)(10)(vi), the Permittee shall maintain on-site and submit, if requested by the Illinois EPA, a report containing the boiler tune-up information described in paragraphs 40 CFR 63.7540(a)(10)(vi)(A) through (C).

7.5.10 Reporting Requirements

a. Reporting of Deviations

For the affected boiler, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as follows. These notifications shall include a description of such deviations, including whether they occurred during startup or malfunction/breakdown, and a discussion of the probable cause of such deviations, any corrective actions taken and any preventative measures taken. [Sections 39.5(7)(a) and (f) of the Act]

- i. The Permittee shall submit written notice to the Illinois EPA within 30 days after any deviation from the relevant applicable requirement in Condition 7.5.4.
- ii. A. The Permittee shall undertake reporting with the quarterly reports required for the coal-fired boilers by Condition 7.1.10-1(a) for deviations from the work practice requirements and recordkeeping requirements.

B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported in writing to

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the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in the initial notifications and reports for such deviations.

- b. Pursuant to 40 CFR 63.7550(b), the Permittee shall submit a report, no later than January 31 of the year following the year during which a boiler tune-up is performed pursuant to Condition 7.5.6(b), with the boiler tune-up information specified at 40 CFR 63.7550(c)(5)(i) through (iii), (xiv) and (xvii).

7.5.11 Intentionally blank.

7.5.12 Compliance Procedures

- a. Compliance with the opacity limit in Condition 7.5.4(a) is addressed by the observations and recordkeeping required by Conditions 7.5.7(a) and 7.5.9(c), respectively.
- b. Compliance with the CO limit of Condition 7.5.4(b) is addressed by the work practice, and recordkeeping required by Conditions 7.5.6(b), and 7.5.9, respectively.
- c. Compliance with the work practices and operating restrictions required by Condition 7.5.6(b), (c) and (d) is addressed by the recordkeeping required by Condition 7.5.9.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

Section 7.0 - Unit Specific Conditions
 Section 7.6 - Gasoline Storage Tank

7.6 Gasoline Storage Tank

7.6.1 Description

The 500 gallon capacity storage tank with submerged loading pipe is associated with non-retail dispensing of gasoline for plant vehicles and equipment.

Note: The description in Condition 7.6.1 is for informational purposes only and implies no limits or constraints.

7.6.2 List of Emission Units and Air Pollution Control Equipment

Unit	Description	Control Equipment
Tank TK2	Gasoline Storage Tank with Submerged Loading Pipe	None

7.6.3 Applicability Provisions

An "affected storage tank" for the purpose of these unit-specific conditions, is the storage tank described in Conditions 7.6.1 and 7.6.2.

7.6.4 Applicable Emission Standards

- a. The affected storage tank is subject to 35 IAC 215.122(b) and 215.583(a)(1), which provide that:
 - i. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe, or satisfies one of several other compliance options as specified in 35 IAC 215.122(b).
 - ii. No person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank at a gasoline dispensing facility unless the tank is equipped with a submerged loading pipe [35 IAC 215.583(a)(1)].

7.6.5 Non-Applicability of Regulations of Concern

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Section 7.6 - Gasoline Storage Tank

- a. The affected storage tank not being subject to the NSPS for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels), 40 CFR Part 60 Subpart Kb, because the capacity of the tank is less than 40 cubic meters (10,566 gallons).
- b. The affected storage tank not being subject to 35 IAC 215.121 and 215.122(a) because the capacity of the affected storage tank is less than 40,000 gallons.
- c. The affected storage tank not subject to the requirements of 35 IAC 215.583(a)(2) related to transfers of gasoline to a stationary storage tank at a gasoline dispensing facility because the affected tank is located in Christian County [35 IAC 215.583(b)].
- d. The affected gasoline storage tank is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for VOM because the affected storage tank does not use add-on controls to achieve compliance with any applicable emission limits.
- e. The affected storage tank is not subject to the National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities, 40 CFR Part 63, Subpart CCCCCC, because the gasoline storage tank is not located at an Area Source for Hazardous Air Pollutants.

7.6.6 Operational Limits

- a. Pursuant to Condition 7.6.4(a) (35 IAC 215.122(b) and 215.583(a)), the affected storage tank shall be equipped, operated and maintained with a submerged loading pipe or an equivalent device approved by the Illinois EPA. (The Illinois EPA has not approved use of other equivalent equipment in lieu of a submerged loading pipe.)

7.6.7 Intentionally Blank.

7.6.8 Inspection Requirements

- a. Not later than May 1st of each calendar year, the Permittee shall conduct an inspection of the affected storage tank to review its physical condition and ability to comply with the applicable

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equipment and operational requirements of Conditions 7.6.6(a), pursuant to Sections 39.5(7)(a) and (d) of the Act.

7.6.9 Recordkeeping Requirements

The Permittee shall maintain records of the following for the affected storage tank, pursuant to Section 39.5(7)(a) and (e) of the Act:

- a. Design information for the capacity of the tank and the presence of a permanent submerged loading pipe.
- b. Operating records or other records for the affected tank that shall include the following:
 - i. Information documenting performance of the inspections that are required by Condition 7.6.8, including date and description of the inspection, confirmation of the adequacy of the specific features of the tank required for control of emissions, and identification of any such features that are not in proper working order or otherwise deficient, with recommendations for maintenance, repair or replacement.
 - ii. Information identifying deviations from applicable equipment requirements, with a detailed description and explanation.
- c. Maintenance and repair records for the affected storage tank, as related to the repair or replacement of the loading pipe.
- d. Records for each shipment of material loaded into the affected storage tank, including type of material and amount.
- e. Throughput of material, gal/mo and gal/yr, by type of material.

7.6.10 Reporting Requirements

For the affected storage tank, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as follows. Such notifications shall include a description of each incident and a discussion of the probable cause of deviation, any

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corrective actions taken and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act:

- a. The Permittee shall submit written notice to the Illinois EPA within 30 days after any filling of an affected storage tank that was not in compliance with the requirements of Conditions 7.6.4 or 7.6.6, i.e., that was conducted without a submerged loading pipe.
- b. The Permittee shall notify the Illinois EPA through the quarterly reports required for the coal-fired boilers by Condition 7.1.10-2(a) for deviations from applicable recordkeeping requirements.

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected storage tank without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or for an activity constituting construction or modification as defined in 35 IAC 201.102.

- a. Changes to components related to the submerged loading pipe, including addition of new components and repair and replacement of components.
- b. Changes in the material stored in the affected storage tank.

7.6.12 Compliance Procedures

- a. Compliance with Condition 7.6.4(a) is addressed by the use of a submerged loading pipe as required in Condition 7.6.6(a) and by the inspections and recordkeeping required by Conditions 7.6.8 and 7.6.9.
- b. Compliance with Condition 7.6.6 is addressed by the inspections and the recordkeeping required by Conditions 7.6.8 and 7.6.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

Section 7.0 - Unit Specific Conditions
Section 7.7 - Dry Sorbent Handling Facility

7.7 Dry Sorbent Handling Facility

7.7.1 Description

The Permittee operates a material handling facility to receive, store, and process sorbent materials for the dry sorbent injection (DSI) systems on the coal-fired boilers (see Section 7.1). The facility includes two railcar unloading stations, two railcar unloading silos (RAILSILO 1 and 2), eight storage silos with individual bin vent baghouses (SILO 1 through 8), eight weigh hoppers with individual cartridge filters, and eight grinding mills with individual two stage receiver baghouse systems.

Note: The description in Condition 7.7.1 is for informational purposes only and implies no limits or constraints.

7.7.2 List of Emission Units and Air Pollution Control Equipment

The following is a list of the emission units for the Dry Sorbent Handling Facility and their associated emission control measures:

Emission Unit Description	Emission Control Measures
Railcar Unloading Stations	Enclosure
Rail Storage Silos	Enclosure and Bin Vent Baghouses
Sorbent Storage Silos	Enclosure and Bin Vent Baghouses
Weigh Hoppers	Enclosure and Cartridge Filters
Grinding Mills	Enclosure and Receiver Baghouses and Cartridge Filters

7.7.3 Applicability Provisions

- a. An "affected process" for the purpose of these unit-specific conditions is an individual process emission unit that handles sorbent materials as described in Conditions 7.7.1 and 7.7.2.
- b. Certain affected processes (specifically, storage silos, weigh hoppers, and mills in the sorbent material handling and storage facilities associated with the affected DSI systems) for which construction, modification, or reconstruction, commenced after August 31, 1983 are also "affected facilities" for purposes of the New Source Performance Standards (NSPS) for Nonmetallic Mineral Processing Plants, 40 CFR 60 Subpart 000, pursuant to 40 CFR 60.670(a)(1). These affected facilities are subject to applicable requirements of the NSPS, 40 CFR 60 Subpart

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000 and related requirements in the NSPS, 40 CFR 60
Subpart A, General Provisions.

7.7.4 Applicable Emission Standards

- a. Pursuant to the NSPS, 40 CFR 60.672(b), fugitive emissions of PM from the affected facilities shall not exceed 7 percent opacity.
- b. Pursuant to the NSPS, 40 CFR 60.672(f), stack emissions of PM, as defined by 40 CFR 60.671, from the affected facilities shall not exceed 7 percent opacity.
- c. The affected processes shall comply with 35 IAC 212.321(a): "no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of [35 IAC 212.321]." Each unit, i.e. each storage silo, weigh hopper, and mill, shall demonstrate compliance individually (see also Attachment 1) [35 IAC 212.321(a)].
- d. The state standard that addresses fugitive emissions, as defined by 35 IAC 211.2490, of the affected processes is set forth in Condition 5.2.2(a).
- e. The state standard that addresses the opacity of the emission of smoke or other particulate matter from the affected processes is set forth in Condition 5.2.2(b).

7.7.5 Non-Applicability of Regulations of Concern

- a. The affected processes are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM because the affected processes do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.7.6 Work Practices, Operational and Production Limits, and Emission Limitations

- a. i. The Permittee shall implement and maintain the control measures for the affected operations, such as enclosures and covers, for emissions of

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Section 7.7 - Dry Sorbent Handling Facility

particulate matter to support periodic monitoring for the applicable requirements in Condition 7.7.4, pursuant to Section 39.5(7)(a) of the Act.

- ii. The control measures implemented and maintained shall be identified and operated in conformance with the record required by Condition 7.7.9(b)(1) to satisfy Condition 7.7.6(a)(i).

b. Pursuant to Construction Permit 11120041,

- i. The throughput of sorbent material for the material handling and storage facilities shall not exceed 210,240 tons per year. [T1]
- ii. Emissions of PM/PM₁₀/PM_{2.5} from the affected sorbent handling, storage, and milling facilities shall not exceed the following limits: [T1]

Operation	Limits	
	Lb/Ton of Material Handled	Tons/Year
Railcar Unloading	0.004	0.4
Storage Silos and Milling Operations	0.04	4.2

- iii. Emissions of fugitive particulate matter due to the increased vehicle traffic on paved plant roads used for transport of sorbents and the additional amount of material captured by the ESPs from the affected boilers with the affected systems shall not exceed 3.6, 0.8, and 0.2 tons per year of PM, PM₁₀, and PM_{2.5}, respectively. [T1]
- iv. Emissions of fugitive particulate matter due to the increased vehicle traffic on unpaved plant roads used for final disposal of additional amount of material captured by the ESPs from the affected boilers with the affected systems shall not exceed 7.8, 2.1, and 0.2 tons per year of PM, PM₁₀, and PM_{2.5}, respectively. [T1]
- v. Compliance with the annual limits shall be determined from the sum of the data for the current month plus the preceding 11 months (running 12 months total). [T1]
- vi. Maintenance and repair of filters and other control measures shall be performed to assure that such

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measures function properly when material is being handled. [T1]

- c. At all times, the Permittee shall maintain and operate affected facilities that are subject to NSPS, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions, pursuant to 40 CFR 60.11(d).

7.7.7 Opacity Observation Requirements

- a. i. The Permittee shall have the opacity of the emissions from the affected processes during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.
 - A. For each affected process, observations shall be conducted not later than two years of the effectiveness of this condition.
 - B. Thereafter, for each affected process, observations shall be conducted every third year.
 - C. Upon written request by the Illinois EPA, such observation shall be conducted for specific affected process(es) not later than 45 calendar days after the Permittee has received of the request or on such later date agreed to by the Illinois EPA.
- ii. A. The duration of opacity observations (for affected processes subject to the NSPS, 40 CFR 60 Subpart 000,) for each test shall be at least 30 minutes (five 6-minute averages).
- B. The duration of opacity observations (for affected processes not subject to the NSPS, 40 CFR 60 Subpart 000,) for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are each not greater than 10.0 percent.
- C. The Permittee shall conduct observations of opacity in accordance with the applicable requirements of 40 CFR 60.675 and 40 CFR 60.8.

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- iii. A. For each set of observations required by Conditions 7.7.7(a)(i)(A), (B), and (C), the Permittee shall notify the Illinois EPA at least 7 days in advance of the date of the first observation(s).
- B. The Permittee shall promptly notify the Illinois EPA of any changes in the date of the first observation(s).
- iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observation(s), if Illinois EPA personnel are present.
- v. The Permittee shall submit a written report for these observations not later than 30 days after the date of completion of each set of opacity observations required by Conditions 7.7.7(a)(i)(A), (B), and (C). The report shall include a copy of the current Reference Method 9 certification of each observer and identify the observer's current employer. This report shall also include the following for each observation:
 - A. Identification of the affected process for which observations were conducted.
 - B. Date and time of observations.
 - C. Description of observation condition, including recent weather.
 - D. Description of the operating conditions of the affected processes.
 - E. Raw data.
 - F. Opacity determinations.
 - G. Conclusions.

7.7.8 Inspection Requirements

- a. The Permittee shall perform inspections as follows to confirm compliance with the requirements of Condition 7.7.6(a) [Sections 39.5(7)(a) and (d) of the Act].

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- i. Inspections of affected systems and associated sorbent material storage and handling facilities, including emission control measures shall be conducted at least once per month when the unit is in operation.
 - ii. If an affected process is not in operation during an inspection, this shall be noted in the inspection record.
 - iii. The records required by Condition 7.7.9(d) for these inspections shall be signed off by supervisory or management personnel.
- b. As part of the inspections of Condition 7.7.8(a), the Permittee shall perform observations of the affected processes for visible emissions in accordance with 35 IAC 212.107 to demonstrate compliance with the requirements of Condition 7.7.4(b), unless the Permittee elects to perform Reference Method 9 observations in accordance with Condition 7.7.7(a). These observations may be scheduled so that only a number of affected processes are reviewed during each inspection, provided, however, that all affected processes that are in routine service shall be observed at least once during each calendar year in which it is operating [Sections 39.5(7)(b) and (d) of the Act].
- c. If visible emissions are observed, the Permittee shall take corrective action within 2 hours to return the status of the process to no visible emission or shall conduct observations of opacity by Reference Method 9 within one week in accordance with Condition 7.7.7(a). If the Permittee performs Reference Method 9 observations under this Condition 7.7.8(b), such observations are not subject to the notice requirements of Condition 7.7.7(a)(iii) through (v) [Sections 39.5(7)(b) and (d) of the Act].

7.7.9 Recordkeeping Requirements

- a. The Permittee shall maintain records of the following for the affected processes, pursuant to Sections 39.5(7)(a) and (e) of the Act:
- i. The maximum operating capacity of each affected process (tons/hr).
 - ii. Manufacturer/vendor or Permittee developed operating and maintenance procedures.
- b. Pursuant to Section 39.5(7)(a) of the Act:

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- i. The Permittee shall maintain a record, which shall be kept up to date to reflect any changes that the Permittee may elect to make, that contains the following for each affected process for which a control measure(s) must be implemented and maintained pursuant to Condition 7.7.6(a)(i).
 - A. The type of emission unit (grinding mills, screening, etc.) and the Permittee's designation for each emission unit with a description of the emission points on the emission unit;
 - B. Whether the emission unit is considered to be an "affected facility" for purposes of the NSPS, with copies of supporting documentation;
 - C. Description of the primary control measures that are utilized, with a description of the control measure and estimated frequency of application, if not continuous; and
 - D. Description of any secondary control measures that would be used based on circumstances (freezing temperatures, recent rain, dry weather, etc.) with identification of the circumstances in which they would be used and whether they would take the place of or supplement the primary control measures.
- ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the control measures identified in the record required by Condition 7.7.9(b)(i) are sufficient to assure compliance with Conditions 7.7.4(c) and 7.7.6(b)(ii) at the maximum process weight rate at which each affected process can be operated (tons sorbent/hour), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. This demonstration shall include the information addressed by Condition 7.7.9(a), emission factors for uncontrolled PM emissions, and/or controlled PM emissions published by USEPA or other credible sources.
- iii. A copy of the record required by Condition 7.7.9(b)(i) shall be submitted to the Illinois EPA not later than 60 days after the effectiveness of

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Condition 7.7.9(b)(i). Any subsequent revisions to this record related to control measures or affected processes, including their method of operation, shall be submitted not later than 30 days after the date of the revision. Upon request by the Illinois EPA, the Permittee shall submit other relevant information related to the control measures.

- c. Pursuant to Construction Permit 11120041, the Permittee shall maintain operating records for the following:
 - i. Records of total amount of sorbent material handled (tons/month and tons/year) with type of sorbent. [T1]
 - ii. Records for the implementation of fugitive dust control measures on roadways used by trucks that handle sorbent and fly ash. [T1]
- d. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall maintain records of the following for the inspections required by Condition 7.7.8:
 - i. Date and time the inspection was performed, name(s) of inspection personnel, and specific process(s) inspected.
 - ii. The observed condition of the control measures identified in the record required by Condition 7.7.9(b)(i) for each inspected affected process, including the presence of any visible emissions or atypical accumulations of sorbent in the vicinity of the process.
 - iii. A description of any maintenance or repair of equipment associated with control measures identified in the record required by Condition 7.7.9(b)(i) that is recommended as a result of the inspection and associated work order number(s).
 - iv. A description of any corrective action taken if visible emissions were observed including whether corrective action took place within 2 hours of the observation and whether the status of the process returned to no visible emission.
- e. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall maintain records of the following for each incident when any affected process operated without the control measures specified by the record in Condition 7.7.9(b)(i):

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- i. The date of the incident and identification of the affected process(es) that was involved.
 - ii. A description of the incident, including the control measure(s) that was not present or operated as required by the records identified in Condition 7.7.9(b)(i); other control measures or mitigation measures that were operated, if any; the measures taken to minimize and correct deficiencies with chronology; and an explanation of whether the emissions or opacity during the incident exceeded any applicable emission or opacity standard, as listed in Condition 7.7.4.
 - iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.
 - iv. The length of time after the incident was identified that the affected processes continued to operate before the control measures identified in the records required by Condition 7.7.9(b)(i) were in place or the processes were shut down (to resume operation only after these control measures were in place); an explanation of why continued operation was necessary; and, if this time was more than one hour, an explanation of why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.
 - v. The estimated total duration of the incident, i.e., the total length of time that the affected processes ran without the control measures required pursuant to the record required by Condition 7.7.9(b)(i) and the estimated amount of limestone handled during the incident.
 - vi. A discussion of the probable cause of the incident and any preventative measures taken.
- f. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall keep records for all opacity observations made in accordance with Reference Method 9 for the affected processes that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.7.7 (Opacity Observations Requirements), or

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otherwise the identity of the observer, a description of the observations that were made, the operating condition of the affected process(es), the observed opacity, copies of the raw data sheets for the observations, and the reason for the opacity observations, e.g., Reference Method 9 opacity observations required by Condition 7.7.7(a)(i), written request by the Illinois EPA, or any required Reference Method 9 opacity observations following observations of visible emissions under Condition 7.7.8(b).

7.7.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for the affected processes, as follows. Such notifications shall include a description of each deviation and a discussion of the probable cause of deviation, any corrective actions taken, and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act.

- i. Within 30 days after the conclusion of an incident in which the Permittee continued to operate an affected process for more than 12 operating hours after discovering that emission control measures required by the record identified in Condition 7.7.9(b)(i) were not present or operating, the Permittee shall submit written notice to the Illinois EPA. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.7.9(e).
- ii.
 - A. Except for events and incidents for which notification or reporting is required by Condition 7.7.10(a)(i), all other notifications shall be submitted with the quarterly reports that are submitted for the coal-fired boilers pursuant to Condition 7.1.10-2(a).
 - B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in prior notifications and reports for such deviations.

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- b. Pursuant to Construction Permit 11120041, the Permittee shall notify the Illinois EPA in advance of using a sorbent other than Trona or sodium bicarbonate in the affected systems. This notification shall be submitted at least two months in advance if possible or otherwise promptly after the Permittee learns that an alternative sorbent will need to be used. This notification shall identify the alternative sorbent and include an explanation of the reason for use of an alternate sorbent, the expected duration for use of the alternative sorbent (if temporary), and the expected changes in sorbent injection rates. [T1]

7.7.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational changes with respect to the affected processes without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, or for an activity for which a permit is required pursuant to 35 IAC 201.142.

- a. Operation of additional dust control measures.
- b. Operation of replacement dust control measures that are of equal or greater effectiveness in controlling visible emissions than the measures being replaced, as recognized in a Construction Permit for such measures.

7.7.12 Compliance Procedures

- a. Compliance with Condition 7.7.4 is addressed by the work practices, observations, inspections, and recordkeeping required by Conditions 7.7.6, 7.7.7, 7.7.8, and 7.7.9, respectively.
- b. Compliance with Condition 7.7.6 is addressed by the inspections and recordkeeping required by Conditions 7.7.8, and 7.7.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

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8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is an affected source under Title IV of the CAA and is subject to requirements pursuant to Title IV of the CAA as specified in Section 6.2 of this permit. To the extent that the federal regulations promulgated under Title IV of the CAA, are inconsistent with the requirements of this permit, the federal regulations promulgated under Title IV of the CAA shall take precedence pursuant to Section 39.5(17)(j) of the Act.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

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- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;
- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
 - i. Describe the physical or operational change;
 - ii. Identify the schedule for implementing the physical or operational change;
 - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
 - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
 - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the condition of this permit. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the

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result of a request by the Illinois EPA shall be submitted as specified in Conditions 8.6.3 and 8.6.4.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

Reports summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Illinois EPA every six months as follows, unless more frequent submittal of such reports is required in Section 7 of this permit [Section 39.5(7)(f) of the Act]:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determinations of emissions and operation that are intended to be made, including sampling and monitoring locations;

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- e. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and
- g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests and/or analyses, with raw data and sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

- a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

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- b. As of the date of issuance of this permit, the addresses of the offices that should generally be utilized for the submittal of reports and notifications are as follows:

i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency (MC 40)
Bureau of Air
Compliance & Enforcement Section (MC 40)
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

OR

Illinois Environmental Protection Agency
Bureau of Air
Compliance & Enforcement Section (#40)
1021 North Grand Avenue East
Springfield, Illinois 62702

ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Bureau of Air
Field Operations Section (#41)
1021 North Grand Avenue East
Springfield, Illinois 62702

iii. USEPA Region 5 - Air Branch

USEPA (AR - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604

- c. Permit applications should be addressed to the Air Permit Section. As of the date of issuance of this permit, the address of the Air Permit Section is as follows:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Air Permit Section (MC 11)
1021 North Grand Avenue East
P.O. Box 19506
Springfield, Illinois 62794-9506

OR

Illinois Environmental Protection Agency

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Division of Air Pollution Control
Air Permit Section (MC 11)
1021 North Grand Avenue East
Springfield, Illinois 62702

8.7 Title I Conditions

Notwithstanding the expiration date on the first page of this CAAPP permit, Title I conditions in this permit, which are identified by a T1, T1N, or T1R designation, remain in effect until such time as the Illinois EPA takes action to revise or terminate them in accordance with applicable procedures for action on Title I conditions. This is because these conditions either: (a) incorporate conditions of earlier permits that were issued by the Illinois EPA pursuant to authority that includes authority found in Title I of the Clean Air Act (T1 conditions), (b) were newly established in this CAAPP permit pursuant to authority that includes such Title I authority (T1N conditions), or (c) reflect a combination of conditions of such previous permits and revisions to those conditions established in this CAAPP permit (T1R conditions). (See also Condition 1.5.)

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9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance with, or violation of, any applicable requirement to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the Permittee, including, but not limited to, challenging the use of the USEPA's credible evidence rule in the context of any future proceeding consistent with *Clean Air Implementation Project v. EPA*, 150 F3d 1200 (D.C. Circuit 1998).

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit

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termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless this permit provides for such continued operation consistent with the Act and applicable Board regulations [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.3 Obligation to Allow Illinois EPA Surveillance

Pursuant to Sections 4(b), 39.5(7)(a), and 39.5(7)(p)(ii) of the Act, upon presentation of credentials and other documents as may be required by law and in accordance with constitutional limitations, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following.

- a. Enter upon the Permittee's premises where the emission unit(s) are located, or emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.

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- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
- d. Sample or monitor any substances or parameters at any location:
 - i. As authorized by the Clean Air Act, at reasonable times, for the purposes of assuring compliance with this CAAPP permit or applicable requirements; or
 - ii. As otherwise authorized by the Act.
- e. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

9.4 Fees

The Permittee shall pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto. [Section 39.5(7)(o)(vi) of the Act] Fees shall be paid by check sent to one of the following two addresses:

Illinois Environmental Protection Agency
Fiscal Services Section
1021 North Grand Avenue East
Springfield, IL 62702

OR

Illinois Environmental Protection Agency
Fiscal Services Section
P.O. Box 19276
Springfield, IL 62794-9276

9.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a

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minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [Section 39.5(7)(e)(ii) of the Act].
- b. Other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Air Quality Planning Section no later than May 1 of the following year, as required by 35 IAC Part 254 and Section 4(b) of the Act.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to: (1) the Illinois EPA, Air Compliance Section, and (2) the Illinois EPA, Air Regional Field Office. (The addresses for the submittal of these compliance certifications are provided in Condition 8.6.4.)

- a. The certification shall include the identification of each term or condition of this permit that is the basis

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of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

- b. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating records, or other relevant evidence:

- i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency;

Note: For this purpose, emergency means a situation arising from sudden and reasonably unforeseeable events beyond the control of the source, as further defined by Section 39.5(7)(k)(iv) of the Act.

- ii. The permitted source was at the time being properly operated;

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- iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
 - iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, revoked, reopened and reissued, or terminated for cause in accordance with applicable provisions of Section 39.5 of the Act. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

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- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or that inaccurate statement were made in establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation and reissuance under Section 39.5(15) of the Act, pursuant to Sections 39.5(5)(e) and (i) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, other portions of this permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and the rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to

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be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of this CAAPP permit will remain in effect until the issuance of a renewal permit [Sections 39.5(5)(l) and (o) of the Act].

Note: Pursuant to Sections 39.5(5)(h) and (n) of the Act, upon submittal of a timely and complete renewal application, the permitted source may continue to operate until final action is taken by the Illinois EPA on the renewal application, provided, however, that this protection shall cease if the applicant fails to submit any additional information necessary to evaluate or take final action on the renewal application as requested by the Illinois EPA in writing. For a renewal application to be timely, it must be submitted no later than 9 months prior to the date of permit expiration.

9.15 General Authority for the Terms and Conditions of this Permit

The authority for terms and conditions of this permit that do not include a citation for their authority is Section 39.5(7)(a) of the Act, which provides that the Illinois EPA shall include such provisions in a CAAPP permit as are necessary to accomplish the purposes of the Act and to assure compliance with all applicable requirements. Section 39.5(7)(a) of the Act is also another basis of authority for terms and conditions of this permit that do include a specific citation for their authority.

Note: This condition is included in this permit pursuant to Section 39.5(7)(n) of the Act.

Section 10.0 - Attachments

10.0 ATTACHMENTS

10.1 Attachment 1 Emissions of Particulate Matter from New Process Emission Units

35 IAC 212.321 - Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972

- a) Except as further provided in this Part, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.
- b) Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and

E = Allowable emission rate; and,

- 1) Up to process weight rates of 408 MG/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

- 2) For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

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- c) Limits for Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
 E = Allowable emission rate in kg/hr or lbs/hr.

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10.2 Attachment 2 Emissions of Particulate Matter from Existing Process Emission Units

35 IAC 212.322 - Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972

- a) Except as further provided in this Part, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.
- b) Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = Process weight rate; and

E = Allowable emission rate; and,

- 1) For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

- 2) For process weight rates in excess of 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

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- c) Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972:

P	Metric	English	
	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and

E = Allowable emission rate in kg/hr or lbs/hr.

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10.3 Attachment 3 - Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

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10.4 Attachment 4 - Guidance

The Illinois has prepared guidance for sources on the Clean Air Act Permit Program (CAAPP) that is available on the Internet site maintained by the Illinois EPA, www.epa.state.il.us. This guidance includes instructions on applying for a revision or renewal of the CAAPP permit.

Guidance On Revising A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-revising.pdf

Guidance On Renewing A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-renewing.pdf

The application forms prepared by the Illinois EPA for the CAAPP are also available from the Illinois EPA's Internet site:

www.epa.state.il.us/air/caapp/index.html

These CAAPP application forms should also be used by a CAAPP source when it applies for a construction permit. For this purpose, the appropriate CAAPP application forms and other supporting information, should be accompanied by a completed Application For A Construction Permit Form (CAAPP Form-199).

Application For A Construction Permit Form (CAAPP Form-199):

www.epa.state.il.us/air/caapp/199-caapp.pdf

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10.5 Attachment 5 - Acid Rain Program Permit

217-782-2113

ACID RAIN PROGRAM
PERMIT

Kincaid Generation, L.L.C.
 Attn: Ted Lindenbusch, Designated Representative
 Kincaid Power Station
 4 Miles West of Kincaid on Route 104
 Kincaid, Illinois 62540

Oris No.: 876
 IEPA I.D. No.: 021814AAB
 Source/Unit: Kincaid Power Station - Units 1 and 2
 Date Received: June 28, 2016
 Date Issued: March 27, 2017
 Effective Date: January 1, 2017
 Expiration Date: February 5, 2020

STATEMENT OF BASIS:

In accordance with Section 39.5(17) if the Illinois Environmental Protection Act and Titles IV and V of the Clean Air Act, the Illinois Environmental Protection Agency is issuing this Acid Rain Program permit, including requested revisions, to Kincaid Generation, L.L.C. for its Kincaid Power Station.

SULFUR DIOXIDE (SO₂) ALLOCATIONS AND NITROGEN OXIDES (NO_x) LIMITS FOR EACH AFFECTED UNIT:

UNIT 1	SO ₂ Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73	Years 2016 and Beyond
		13,592
	NO _x Limit	0.86 Lb/mmBtu (Standard Limit for Cyclone Fired Boilers)
UNIT 2	SO ₂ Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73	Years 2016 and Beyond
		14,977
	NO _x Limit	0.86 Lb/mmBtu (Standard Limit for Cyclone Fired Boilers)

PERMIT APPLICATION: The permit application, including the NO_x compliance plan, is attached and incorporated as part of this permit. The Permittee must comply with the standard requirements and special provisions set forth in the application.

COMMENTS, NOTES, AND JUSTIFICATIONS: This permit contains provisions related to sulfur dioxide (SO₂) emissions and requires the Permittee to hold SO₂

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allowances under the federal Acid Rain Program to account for SO₂ emissions from the affected units. An allowance is a limited authorization to emit up to one ton of SO₂ during or after a specified calendar year. The transfer of allowances to and from a unit account does not necessitate a revision to the unit SO₂ allocations denoted in this permit (See 40 CFR 72.84).

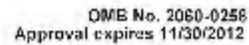
This permit contains provisions related to NO_x emissions requiring affected units to comply with applicable emission limitations for NO_x under the Acid Rain Program. In addition to the described NO_x compliance plan, Kincaid Units 1 and 2 shall comply with all other applicable requirements of 40 CFR Part 76, including, the duty to reapply for a NO_x compliance plan, and requirements covering excess emissions.

This permit does not affect the source's responsibility to meet all other applicable local, state and federal requirements, including state requirements under 35 Ill. Adm. Code Part 217 Subpart V, which addresses NO_x emissions from Kincaid Units 1 and 2.

If you have any questions regarding this permit, please contact the CAAPP Unit at 217 785-1705.

Raymond E. Pilapil
Manager, Permits Section
Division of Air Pollution Control

REP:MTR:DBR:clc



For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: ☐ New ☒ Revised ☐ for ARP permit renewal

Identify the facility name, State, and plant (ORIS) code.

Enter the unit ID#
for every affected
unit at the affected
source in column "a"

EPA Form 7610-10 (Revised 7-2014)

Facility (Source) Name (from STEP 1): Kincaid

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Permit Requirements**STEP 1**

Read the standard requirements.

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

Facility (Source) Name from STEP 1:	Kincaid
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Sulfur Dioxide Requirements, Cont'd.**STEP 3, Cont'd**

- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
 - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission

Facility (Source) Name (from STEP 1)	Kincaid
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of a new certificate of representation changing the designated representative;

STEP 3, Cont'd.**Recordkeeping and Reporting Requirements, Cont'd.**

- (i) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (ii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (v) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with

Facility (Source) Name (from STEP 1)

Kincaid

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any other provision of the Act, including the provisions of title I of the Act relating

STEP 3, Cont'd.

Effect on Other Authorities, Cont'd.

to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Read the
certification
statement
sign, and date

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name James Klenke

Signature

James Klenke

Date

2/6/23 JKL

Section 10.0 - Attachments



United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0268
Approval expires 11/30/2012

Acid Rain NO_x Compliance Plan

For more information, see instructions and refer to 40 CFR 76.9

Page 1

This submission is: ☐ New ☒ Revised

Page 1 of 2

STEP 1

Indicate plant name, State, and Plant code from the current Certificate of Representation covering the facility.

Plant Name	Kincaid	State	IL	Plant Code	876
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STEP 2

Identify each affected Group 1 and Group 2 boiler using the unit IDs from the current Certificate of Representation covering the facility. Also indicate the boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom, and select the compliance option for each unit by making an "X" in the appropriate row and column.

	Unit 1 Type CY	Unit 2 Type CY	Unit 3 Type	Unit 4 Type	Unit 5 Type	Unit 6 Type
(1) Standard annual average emission limitation of 0.52 lb/mmBtu (for Phase I dry bottom wall-fired boilers)						
(2) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)						
(3) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)						
(4) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)						
(5) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)						
(6) Standard annual average emission limitation of 0.66 lb/mmBtu (for cyclone boilers)	X	X				
(7) Standard annual average emission limitation of 0.00 lb/mmBtu (for vertically fired boilers)						
(8) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)						

EPA Form 7610-24 (Revised 7/2014)

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NO_x Compliance - Page 2

STEP 2, cont'd

Kincaid
Plant Name (From Step 1)

	Unit	Unit	Unit	Unit	Unit	Unit
	ID#	ID#	ID#	ID#	ID#	ID#
	Type	Type	Type	Type	Type	Type
(j) NO _x Averaging Plan (includes NO _x Averaging form)						
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit at firing level)	X	X				
(l) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO _x Averaging (check the NO _x Averaging Plan box and include NO _x Averaging Form)						
(m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17(a)(2)(i)(C), (a)(2)(i)(B), or (a)(2)(i)						

STEP 3: Identify the first calendar year in which this plan will apply.

January 1, 2017

STEP 4: Read the special provisions and certification, enter the name of the designated representative, sign and date.

Special Provisions

General: This source is subject to the standard requirements in 40 CFR 72.9. These requirements are listed in this Source's and Plant Permit.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which this submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	James Klenke	
Signature	<i>James Klenke</i>	Date 2017 June 28



Electronic Filing: Received, Clerk's Office 08/06/2023
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

BRUCE RAUNER, GOVERNOR

LISA BONNETT, DIRECTOR

Section 10.0 - Attachments

217/785-1705

CONSTRUCTION PERMIT

PERMITTEE

Kincaid Generation, L.L.C.
Attn: James Klenke
4 Miles West of Kincaid on Route 104
Kincaid, Illinois 62540

Application No.: 14060006 I.D. No.: 021814AAB
Construction of: Emission Control Program
Date Received: June 5, 2014
Date Issued: December 10, 2015
Location: Kincaid Power Station, West of Kincaid on Route 104

This permit is hereby granted to the above-designated Permittee to CONSTRUCT an emission control program for Kincaid Units 1 and 2, including use of a particulate matter continuous emissions monitoring system, as described in the above-referenced application. This permit is subject to standard conditions attached hereto and the following special condition(s):

1. Introduction.

This permit addresses additional air pollution control requirements, including use of a particulate matter continuous emissions monitoring system (PM CEMS), that apply to Kincaid Units 1 and 2 (the "Affected Units"). These requirements apply to the Permittee, as it is the owner of these units and the Kincaid Power Station. These additional requirements were established in a Consent Decree in Civil Action Number 13-3086 in the United States District Court of the Central District of Illinois (the "Decree"). The Decree was originally entered by the court in an order signed on July 17, 2013. The case was originally captioned *United States of America, Plaintiff, v. Dominion Energy, Inc., Dominion Energy Brayton Point, LLC, and Kincaid Generation, LLC, Defendants*. The caption for this case was subsequently changed to *United States of America v. Dominion Energy, Inc., Brayton Point Energy, LLC, Kincaid Generation, LLC, and EquiPower Resources Corp.* and the Decree was amended pursuant to a Stipulation to Non-Material Modification of Consent Decree, executed December 5, 2013.

Among other matters, the Decree contains unit-specific and plant-specific performance, operational, maintenance, and control technology requirements including, but not limited to, emission rates and plant-wide annual tonnage limitations. For the various generating stations that are addressed by the Decree, Paragraph 169 of the Decree requires that the relevant party either apply to the State permitting authority to include the applicable requirements in a federally enforceable non-Title V permit (e.g., a construction permit) or request a site-specific amendment to the applicable State Implementation Plan to include such

Page 2

requirements. For the Kincaid Power Station, the Permittee elected to satisfy Paragraph 169 of the Decree by applying for a construction permit that would include the relevant requirements of the Decree.

As addressed by Condition 2, certain paragraphs of the Decree, as identified in Attachment A of this permit, are incorporated into this permit by reference and are enforceable through this permit. A copy of the Decree is attached to this permit for informational purposes as an Appendix.

2. Provisions of the Decree Incorporated into this Permit by Reference

Subject to the following terms and conditions, the Permittee shall comply with the requirements and limitations in the paragraphs of the Decree listed in Attachment A of this permit, which paragraphs are incorporated into this permit by reference:

- a. Each paragraph listed in Attachment A of this permit is incorporated by reference in its entirety, along with any and all paragraphs of the Decree explicitly referenced in such paragraph.
- b. The Permittee's obligations under this permit to comply with the requirements and limitations in the paragraphs of the Decree incorporated into this permit by reference is limited to the requirements and limitations applicable to, and only to the extent applicable to, the Kincaid Power Station.
- c. If the Decree is amended, the terms and conditions of the amended Decree shall govern as of the date that the Decree is amended or on such other date provided in the amendment to the Decree.
- d. Beginning on the date that enforcement of the Decree is terminated, as is provided for by Paragraph 207 of the Decree, the following provisions of the Decree shall cease to apply and shall no longer be incorporated into this permit by reference:
 - i. The provisions for Periodic Reporting, i.e., Paragraphs 122 through 125 of the Decree, and the provisions for Notices, i.e., Paragraphs 178 through 180 of the Decree. In their place, the reporting provisions contained in Conditions 4(b), 4(c) and 5 shall apply.
 - ii. The provisions for Force Majeure, i.e., Paragraphs 147 through 155 of the Decree.

3. Recordkeeping to Address Provisions of the Decree Incorporated into this Permit by Reference

- a. As the paragraphs of the Decree listed in Attachment A of this permit are incorporated into this permit by reference, the Permittee shall keep records as needed to reasonably demonstrate

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compliance with each requirement and limitation in these paragraphs, including the following records:

- i. Records for the operation of any pollution control device for an Affected Unit required to Continuously Operate by Paragraphs 60, 76 or 89 of the Decree.
 - ii. Records for the implementation of the operational practices and work practices identified in Paragraph 89 of the Decree for the ESP on each Affected Unit.
 - iii. Records for the data collected by the continuous emissions monitoring systems (CEMS) required by the Decree.
 - iv. Records for the operation, calibration and maintenance of the CEMS required by the Decree.
 - v. Copies of reports submitted to the Illinois EPA pursuant to the Decree, including copies of test reports.
 - b. All records required by this permit shall be retained for at least five years from creation, shall be readily accessible to the Permittee and Illinois EPA, and made available for inspection and copying by the Illinois EPA.
4. Reporting to Address Provisions of the Decree Incorporated into this Permit by Reference
 - a. As related to the notifications, submissions and other communications required by the paragraphs of the Decree listed in Attachment A of this permit until the enforcement of the Decree is terminated:
 - i. Whenever the Permittee provides a communication to the USEPA that is required pursuant to such paragraph, the Permittee shall also provide a copy of such communication to the Illinois EPA.
 - ii. Whenever the Permittee is the recipient of a communication from USEPA that is required by such paragraph, unless such communication indicates that USEPA has directly provided a copy of the communication to the Illinois EPA, the Permittee shall provide a copy of the communication to the Illinois EPA.
 - b. Beginning on the date that enforcement of the Decree is terminated, the Permittee shall be subject to the following requirements for submittal of reports to the Illinois EPA:
 - i. A test report for each performance test for PM and each stack test for condensable particulate matter conducted, respectively, pursuant to Paragraphs 93 and 95 of the

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Decree. These reports shall be submitted within 60 Days of completion of the test. In addition to other information, these reports shall include the emission rates in pounds per million Btu heat input (lbs/mmBtu) measured during the test.

Note: This condition is adapted from Paragraphs 94 and 95 of the Decree.

- ii. A semi-annual compliance report within 60 Days after the end of each half of the calendar year (January through June and July through December). These reports shall include the following information for the six-month reporting period:

- A. For the NO_x emissions of the Affected Units:

- I. The average of the 30-Day Rolling Average Emission Rates during the reporting period (lbs/mmBtu), provided, however, that any 30-Day Rolling Average Emission Rate that is more than 0.080 lbs/mmBtu shall not be included when calculating this average emission rate.
- II. Identification of each 30-Day period in which the Permittee complied with a 30-Day Rolling Average Emission Rate of 0.090 lbs/mmBtu, as provided for by Paragraph 60 of the Decree, with information showing that the requisites for compliance with this rate were satisfied, including calculations for the 30-Day Average NO_x emission rate for the Affected Unit excluding relevant low-load operation.
- III. For the report for the second half of each calendar year, the plant-wide annual emissions of the Affected Units in tons.

- B. For the SO₂ emissions of the Affected Units:

- I. The average of the 30-Day Rolling Average Emission Rate during the reporting period (lbs/mmBtu), provided, however, that any 30-Day Rolling Average Emission Rate that is more than 0.100 lbs/mmBtu shall not be included when calculating this average emission rate.
- II. For the report for the second half of each calendar year, the plant-wide annual emissions of the Affected Units in tons.

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- C. For the PM emissions of the Affected Units:
 - I. The average PM Emission Rate monitored during the reporting period (lbs/mmBtu).
 - II. The monitored data in lbs/mmBtu in electronic format on a 3-hour rolling average basis and a 24-hour rolling average basis. For this purpose, data shall be provided in a Microsoft Excel compatible format unless the Illinois EPA agrees to an alternative format.
- D. An identification of each period when any pollution control device at the Kincaid Power Station required by Paragraphs 60, 76 or 89 of the Decree to Continuously Operate did not meet that requirement, with description, the reason(s) why the requirement was not met, and the basis for the Permittee's non-compliance with the requirement.
- E. An identification of each time that an operational practice or work practice required by Paragraph 89 of the Decree for an electrostatic precipitator (ESP) at the Kincaid Power Station was not implemented, with description, the reason(s) why the practice was not implemented, and the basis for the Permittee's compliance or non-compliance with the requirement.

Note: This condition is adapted from Paragraph 122 of the Decree.

- iii. The operation and maintenance of the PM CEMS on the Affected Units required by Paragraph 97, 99, 100 and 102 of the Decree shall be addressed in the semi-annual monitoring reports that the Permittee is required to submit pursuant to the CAAPP permit for the Source.
- c. Notwithstanding Condition 4(b)(ii), beginning on the date that enforcement of the Decree is terminated:
 - i. If requirements for submittal of semi-annual compliance reports related to the provisions of the Decree are contained in the CAAPP permit for the Source, the requirements of Condition 4(b)(ii) shall cease to apply. The Permittee will then be subject to the relevant provisions of that CAAPP permit that address submittal of semi-annual compliance reports for the Affected Units.
 - ii. If requirements for submittal of semi-annual compliance reports related to the provisions of the Decree are not yet contained in the CAAPP permit for the Source:

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- A. The Permittee may consolidate the semi-annual compliance reports required by Condition 4(b)(ii) in the semi-annual compliance reports submitted by the Permittee for the Affected Units pursuant to the CAAPP permit for the Source, provided that such reports specifically identify the information that is submitted to address the reporting requirements of Condition 4(b)(ii), with reference to this permit and the relevant provision(s) in Condition 4(b)(ii).
- B. Each report submitted by the Permittee pursuant to Condition 4(b)(ii) shall be signed and certified by the Responsible Official, as defined in Section 39.5(1) of the Environmental Protection Act, for the Source. Unless a report is consolidated with a report required by the CAAPP permit for the Source, the report shall contain the following certification:

This information was prepared either by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my evaluation, or the direction and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, I hereby certify under penalty of law that, to the best of my knowledge and belief, this information is true, accurate, and complete. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the Illinois EPA.

Note: This condition is adapted from Paragraphs 122, 123 and 125 of the Decree.

5. Reporting of Deviations

Beginning on the date that enforcement of the Decree is terminated:

- a. If the Permittee violates or deviates from any provision of this permit, the Permittee shall notify the Illinois EPA in a quarterly deviation report. In these reports, the Permittee shall describe each violation or deviation during the reporting period, explain the cause or causes of each violation or deviation, describe any corrective measures taken or to be taken by the Permittee to cure the violation or deviation, and describe any measures taken or to be taken to prevent a similar violation or deviation in the future.

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- b.
 - i. If the requirements of this permit are addressed in the CAAPP permit for the Source, the Permittee shall submit the deviation reports for the Affected Units required by this condition in accordance with the relevant provisions of the CAAPP permit for the Source that address submittal of such reports.
 - ii. If the requirements of this permit are not yet addressed in the CAAPP permit for the Source:
 - A. The Permittee may consolidate the deviation reports required by this condition in the quarterly deviation reports submitted by the Permittee for the Affected Units pursuant to the CAAPP permit, provided that such reports specifically identify the information that is submitted to address the reporting requirements of this permit, with reference to this permit and the relevant provision.
 - B. Each report submitted by the Permittee pursuant to this condition shall also be signed and certified by the Responsible Official, as provided for by Condition 4(c)(ii)(B).
 - C. If a deviation report is not consolidated with the quarterly deviation report submitted by the Permittee for the Affected Units pursuant to the CAAPP permit, the report shall be submitted within 60 days after the end of the calendar quarter.

Note: This condition is adapted from Paragraphs 122, 123 and 124 of the Decree.

6. Notification for Termination of Enforcement of the Decree

When enforcement of the Decree is terminated, as provided for by Paragraph 207 of the Decree, the Permittee shall notify the Illinois EPA within 30 days. This notification shall identify the date on which the enforcement of the Decree was terminated and be accompanied by a copy of the relevant document by which enforcement of the Decree was terminated.

7. Reporting and Notification Requirements for Installation of the PM CEMS

- a. The Permittee shall submit semi-annual progress reports to the Illinois EPA addressing any steps that have been completed during the reporting period and any steps that are planned for the next reporting period related to installation and initial correlation testing of the PM CEMS on the Affected Units. These reports shall be submitted within 60 days of the end of the calendar half, with the first report submitted by February 29, 2016.

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- b. The Permittee shall notify the Illinois EPA when the installation and initial correlation testing of the PM CEMS on the Affected Units has been successfully completed. This notification shall be submitted within 30 days of such date. Following submittal of this notification, progress reports shall no longer be required pursuant to Condition 7(a).

8. General Requirements for Records and for Notifications and Reports

- a. All records required by this permit shall be retained for at least five years and be available for inspection and copying by the Illinois EPA. For this purpose, required records, other than records related to NOx and SO₂ allowances, shall be kept at or be accessible from the Source or a nearby facility associated with the Source.
- b. All notifications, submissions and other communications required to be submitted to the Illinois EPA by this permit, shall be submitted to the Illinois EPA at the following address unless the Illinois EPA notifies the Permittee that another address should be used:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (MC 40)
P. O. Box 19276
1021 North Grand Avenue East
Springfield, Illinois 62794-9276

If you have any questions on this permit, please contact Christopher Romaine at 217/785-1705.

Raymond E. Pilapil
Acting Manager, Permit Section
Division of Air Pollution Control

REP:CPR:psj

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ATTACHMENT A:

Provisions of the Decree Incorporated into This Permit by Reference

As provided by Condition 2(a) of this permit, the following paragraphs of the Decree are incorporated into this permit by reference to the extent that they are applicable to the Kincaid Power Station.

Definitions:

The definitions in Paragraphs 5 through 57 of the Decree to the extent the terms defined by these paragraphs are used in other definitions in these paragraphs or are used in the paragraphs of the Decree listed below.

Requirements Related to NO_x Emissions:

Operation and Performance Requirements and Emission Limitations:
Paragraphs 60, 61, 62 and 63.

Use and Surrender of NO_x Allowances:
Paragraphs 64, 65, 66, 67, 68, 69, 70, 71 and 72.^a

Requirements Related to SO₂ Emissions:

Operation and Performance Requirements and Emission Limitations:
Paragraphs 76, 77, 78 and 79.

Use and Surrender of SO₂ Allowances:
Paragraphs 80, 81, 82, 83, 84, 85, 86, 87 and 88.^a

Requirements for PM Emissions:

Operation Requirements:
Paragraph 89.

Emission Limitation:
Paragraphs 92, 93, 94, 95, 97, 98, 99, 100, 101, 102 and 103.

Requirements for Periodic Reporting:

Paragraphs 122, 123, 124 and 125.^b

Force Majeure Provisions:

Paragraphs 147, 148, 149, 150, 151, 152, 153, 154 and 155.^c

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ATTACHMENT A (continued):

Requirements for Notices:

Paragraphs 178, 179 and 180.^b

General Provisions:

Paragraph 189 and 197.

Notes

a. As provided by Paragraphs 68 and 84 of the Decree, these requirements of the Decree related to surrender of NO_x and SO₂ allowances are permanent injunctions and are not subject to the provisions of the Decree for termination of enforcement of the Decree.

b. As provided by Condition 2(d)(i) of this permit, beginning on the date that enforcement of the Decree is terminated, Paragraphs 122 through 125 and Paragraphs 178 through 180 will no longer be incorporated into this permit by reference and will no longer apply. At such time, the Permittee shall submit notifications and reports as provided by Conditions 4(b), 4(c) and 5 of this permit.

c. As provided by Condition 2(d)(ii) of this permit, beginning on the date that enforcement of the Decree is terminated, these provisions of the Decree related to Force Majeure will no longer be incorporated into this permit by reference and will no longer apply.

Appendix: Consent Decree

(Copy of the original Consent Decree in the matter of *United States of America, Plaintiff, v. Dominion Energy, Inc., Dominion Energy Brayton Point, LLC, and Kincaid Generation, LLC Defendants*, Civil Action Number 13-3086 in the United States District Court of the Central District of Illinois, as entered by the court in an order signed on July 17, 2013.)

EXHIBIT C



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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

BRUCE RAUNER, GOVERNOR

ALEC MESSINA, DIRECTOR

217/785-1705

"REVISED" CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE

Illinois Power Generating Company
Attn: Rick Diericx
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

Application No.: 95090066

I.D. No.: 079808AAA

Applicant's Designation: Newton

Operation of: Newton Power Station

Original Date Received: September 07, 1995

Original Date Issued: September 29, 2005

Expiration Date¹: November 19, 2020

Initial Effective Date: November 19, 2015

Source Location: 6725 North 500th Street, Newton, Jasper County

Responsible Official: Alan Bogardus, Managing Director Plant Operations, Newton Power Station

Permit Authorization:

This permit is hereby granted to the above-designated Permittee for operation of the above-referenced source. This permit is subject to the terms and conditions contained herein.

Type of Permit Revision: Reopening for Cause

Date Revised Permit Issued: May 23, 2017

This permit authorization has been provided for the revisions to this CAAPP permit, as further described in the statement of basis that accompanied the draft of this revised permit, that have been made by the procedures for "reopening of CAAPP permits for cause" at Section 39.5(15)(a) and (c) of the Illinois Environmental Protection Act. These revisions make changes to the CAAPP permit to address new applicable requirements for emission units covered by the permit, which requirements have become applicable to these units since the issuance of the initial CAAPP permit. In addition, certain requirements that are no longer applicable to these units have been removed from the permit.

Please note that this CAAPP permit has been revised by multiple processes under the CAAPP, each with different legal authority, procedures and standards for issuance. Because of the interplay of the various revisions, a single revised permit has been prepared. Separate permit authorizations are provided for other revisions to this permit, which were made by other processes under the CAAPP.

If you have any questions concerning this permit, please contact the CAAPP Unit at 217/785-1705 (217/782-9143 TDD).

Raymond E. Pilapil
Manager, Permit Section
Division of Air Pollution Control

REP:MTR:DBR:clc

cc: Illinois EPA, FOS, Region 3
USEPA

¹ Except as addressed in Condition 8.7 of this permit



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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

BRUCE RAUNER, GOVERNOR

ALEC MESSINA, DIRECTOR

217/785-1705

"REVISED" CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE

Illinois Power Generating Company
Attn: Rick Diericx
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

Application No.: 95090066 I.D. No.: 079808AAA
Applicant's Designation: Newton Operation of: Newton Power Station
Original Date Received: September 07, 1995
Original Date Issued: September 29, 2005
Expiration Date²: November 19, 2020
Initial Effective Date: November 19, 2015
Source Location: 6725 North 500th Street, Newton, Jasper County
Responsible Official: Alan Bogardus, Managing Director Plant Operations, Newton Power Station

Permit Authorization:

This permit is hereby granted to the above-designated Permittee for operation of the above-referenced source. This permit is subject to the terms and conditions contained herein.

Type of Permit Revision: Significant Modification
Date Revised Permit Issued: May 23, 2017

This permit authorization has been provided for the revisions to the CAAPP permit, as further described in the statement of basis that accompanied the draft of this revised permit, that have been made by the procedures for significant modifications to CAAPP permits at Section 39.5(14)(c) of the Illinois Environmental Protection Act. These revisions include other changes to this CAAPP permit that would not have been proper to address in the reopening and that do not meet the criteria in the Act for minor modifications and administrative amendments of CAAPP permits.

Please note that this CAAPP permit has been revised by multiple processes under the CAAPP, each with different legal authority, procedures and standards for issuance. Because of the interplay of the various revisions, a single revised permit has been prepared. Separate permit authorizations are provided for other revisions to this permit, which were made by other processes under the CAAPP.

If you have any questions concerning this permit, please contact the CAAPP Unit at 217/785-1705 (217/782-9143 TDD).

Raymond E. Pilapil
Manager, Permit Section
Division of Air Pollution Control

REP:MTR:DBR:clc
cc: Illinois EPA, FOS, Region 3
USEPA

² Except as addressed in Condition 8.7 of this permit.



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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

BRUCE RAUNER, GOVERNOR

ALEC MESSINA, DIRECTOR

217/785-1705

"REVISED" CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE

Illinois Power Generating Company
Attn: Rick Diericx
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

Application No.: 95090066 I.D. No.: 079808AAA
Applicant's Designation: Newton Operation of: Newton Power Station
Original Date Received: September 07, 1995
Original Date Issued: September 29, 2005
Expiration Date³: November 19, 2020 Initial Effective Date: November 19, 2015
Source Location: 6725 North 500th Street, Newton, Jasper County
Responsible Official: Alan Bogardus, Managing Director Plant Operations, Newton Power Station

Permit Authorization:

This permit is hereby granted to the above-designated Permittee for operation of the above-referenced source. This permit is subject to the terms and conditions contained herein.

Type of Permit Revision: Minor Modification
Date Revised Permit Issued: May 23, 2017

This permit authorization has been provided for these revisions of the CAAPP permit that have been made by the procedures for minor modifications of CAAPP permits at Section 39.5(14)(a)(i) of the Illinois Environmental Protection Act. These revisions involve changes to the existing requirements of this CAAPP permit that were not significant but were not appropriate to be addressed as part of the reopening of this permit or as administrative amendments of this permit.

Please note that this CAAPP permit has been revised by multiple processes under the CAAPP, each with different legal authority, procedures and standards for issuance. Because of the interplay of the various revisions, a single revised permit has been prepared. Separate permit authorizations are provided for other revisions to this permit, which were made by other processes under the CAAPP.

Raymond E. Pilapil
Manager, Permit Section
Division of Air Pollution Control

REP:MTR:DBR:clc

cc: Illinois EPA, FOS, Region 3
USEPA

³ Except as addressed in Condition 8.7 of this permit.



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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

BRUCE RAUNER, GOVERNOR

ALEC MESSINA, DIRECTOR

217/785-1705

"REVISED" CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE

Illinois Power Generating Company
Attn: Rick Diericx
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

Application No.: 95090066 I.D. No.: 079808AAA
Applicant's Designation: Newton Operation of: Newton Power Station
Original Date Received: September 07, 1995
Original Date Issued: September 29, 2005
Expiration Date⁴: November 19, 2020 Initial Effective Date: November 19, 2015
Source Location: 6725 North 500th Street, Newton, Jasper County
Responsible Official: Alan Bogardus, Managing Director Plant Operations, Newton Power Station

Permit Authorization:

This permit is hereby granted to the above-designated Permittee for operation of the above-referenced source. This permit is subject to the terms and conditions contained herein.

Type of Permit Revision: Administrative Amendment
Date Revised Permit Issued: May 23, 2017

This permit authorization has been provided for the revisions of the CAAPP permit that have been made by the procedures for administrative amendments of CAAPP permits at Section 39.5(13) of the Illinois Environmental Protection Act. These changes involve typographical corrections and minor administrative changes. The revised federal Acid Rain Program Permit, which was issued by the Illinois EPA for this source in another permit action, has also been included in this revised CAAPP permit as Attachment 5.

Please note that this CAAPP permit has been revised by multiple processes under the CAAPP, each with different legal authority, procedures and standards for issuance. Because of the interplay of the various revisions, a single revised permit has been prepared. Separate permit authorizations are provided for other revisions to this permit, which were made by other processes under the CAAPP.

If you have any questions concerning this permit, please contact the CAAPP Unit at 217/785-1705 (217/782-9143 TDD).

Raymond E. Pilapil
Manager, Permit Section
Division of Air Pollution Control

REP:MTR:DBR:clc

cc: Illinois EPA, FOS, Region 3
USEPA

⁴ Except as addressed in Condition 8.7 of this permit.

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Newton Power Station
I.D. No.: 079808AAA
Permit No.: 95090066

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1.0 INTRODUCTION

1.1 Source Identification

Illinois Power Generating Company - Newton Power Station
6725 North 500th Street
Newton, Illinois 62448
618/783-8402

I.D. No.: 079808AAA
Acid Rain Permit ORIS Code No.: 6017

Standard Industrial Classification: 4911, Electrical Services

1.2 Owner/Parent Company

Illinois Power Generating Company
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

1.3 Operator

Illinois Power Generating Company
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

Rick Diericx
618/343-7761

1.4 General Source Description:

Illinois Power Generating Company operates one coal-fired boiler at the Newton Power Station to produce electricity.

1.5 Title I Conditions

This CAAPP permit contains certain conditions for units at this source that address the applicability of permitting programs for the construction and modification of sources, which programs were established pursuant to Title I of the Clean Air Act (CAA) and regulations thereunder. These programs include 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification (MSSCAM), and are implemented by the Illinois EPA pursuant to Sections 9, 9.1, 39(a) and 39.5(7)(a) of Illinois' Environmental Protection Act (Act). These "Title I conditions" within this permit are specifically designated as "T1", if they reflect requirements established in construction permits issued for this source, "T1R" if they revise requirements established in such construction permits, or "T1N" if they are newly established in this CAAPP permit. These conditions continue in effect, notwithstanding the expiration date specified on the first page of this permit, as their authority derives from Titles I and V of the CAA, as well as Titles II and X of the Act. (See also Condition 8.7.)

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

acfm	Actual Cubic Feet Per Minute
ACI	Activated Carbon Injection
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAIR	Clean Air Interstate Rule
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CSAPR	Cross-State Air Pollution Rule
dcfm	dry cubic feet per minute
EGU	Electrical Generating Unit(s)
ESP	Electrostatic Precipitator
°F	degrees Fahrenheit
FGC	Flue Gas Conditioning
FGD	Flue Gas Desulfurization
ft	foot
ft ³	cubic foot
Gal	Gallon
GWh	Gigawatt hour (1.0E+3 MWh)
HAP	Hazardous Air Pollutant
HP	horsepower
hr	Hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
°K	degrees Kelvin
Kg	kilogram
kW	Kilowatts
Lb or lb	Pound
LNB	Low NO _x Burners
m	meter
MACT	Maximum Achievable Control Technology
MATS	Mercury and Air Toxics Standard - 40 CFR 63 Subpart UUUUU
mmBtu	million British thermal units
MW	Megawatts
MWh	Megawatt hour
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards (40 CFR Part 60)
NSSA	New Source Set-Aside
ORIS	Office of Regulatory Information System

Newton Power Station
I.D. No.: 079808AAA
Permit No.: 95090066

OFA	Over-Fire Air
OM	organic material
PM	Particulate Matter
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
PM _{2.5}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
ppm	parts per million
PM CPMS	Particulate Matter Continuous Parameter Monitoring System
PSD	Prevention of Significant Deterioration (40 CFR 52.21)
psia	pounds per square inch absolute
RATA	Relative Accuracy Test Audit
RMP	Risk Management Plan
SO ₂	Sulfur Dioxide
T	ton (2000 pounds)
TBtu	Trillion British thermal units (1,000,000,000,000 Btu)
TR	Transport Rule
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOC or VOM	volatile organic compounds <u>or</u> volatile organic material
VOL	volatile organic liquid
WFGD	Wet Flue Gas Desulfurization
yr	year

3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

- 3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

Glycol Storage Tanks
Cooling Towers
ACI Silo and Delivery System
Sorbent Injection Pilot Systems

- 3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

None

- 3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Equipment used for filling drums, pails, or other packaging containers, excluding aerosol cans, with soaps, detergents, surfactants, lubricating oils, waxes, vegetable oils, greases, animal fats, glycerin, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(8)].

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Gas turbines and stationary reciprocating internal combustion engines of less than 112 kW (150 horsepower) power output [35 IAC 201.210(a)(15)].

Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1,118 kW (150 and 1,500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a)(16)].

Loading and unloading systems for railcars, tank trucks, or watercraft that handle only the following liquid materials, provided an organic solvent has not been mixed with such materials: soaps, detergents, surfactants, lubricating oils, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(18)].

- 3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

Note: The heating of a coal-fired boiler with auxiliary fuel during maintenance and repair of the boiler is considered an insignificant activity under 35 IAC 201.210(b)(29) and is generally not addressed by the unit-specific conditions of this permit for the boiler. Notwithstanding such status as an insignificant activity, the opacity of the exhaust from the coal fired boiler is at all times subject to applicable opacity standards and the unit-specific conditions of this permit for the boiler that relate to opacity are applicable during maintenance and repair of the boiler.

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182.
- 3.2.2 For each particulate matter process emission unit, other than units excluded by 35 IAC 212.323 or 212.681, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.3 Addition of Insignificant Activities

- 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal

application for this permit is submitted, pursuant to 35 IAC 201.212(a).

3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) or 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.

3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

3.4 Emergency Diesel Engines

3.4.1 Description

The plant has emergency diesel engines for emergency equipment (the affected engines). These engines include a number of older engines (four smaller engines with a rating of 500 brake horsepower (BHP) or less for emergency water circulation pumps and alternate water intake pumps, all installed before June 12, 2006, and two larger engines with ratings of more than 500 BHP for station emergency generators, both installed before December 19, 2002). These engines also include a newer engine (an engine for a fire pump installed in 2009).

Note: The description in Condition 3.4.1 is for informational purposes only and implies no limits or constraints.

3.4.2 Applicable Federal Emission Standards

a. The engine for the fire pump, as well as any other affected engine that may be installed that meets applicability criteria in 40 CFR 60.4200, is subject to the NSPS for Stationary Compression Ignition Reciprocating Internal Combustion Engines (SI RICE), 40 CFR 60 Subpart IIII. For each such engine, the Permittee must comply with the applicable requirements of 40 CFR 60 Subpart IIII and applicable requirements of the General Provisions of the NSPS, 40 CFR 60 Subpart A.

i. For the engine for the fire pump, the Permittee is subject to requirements of the NSPS because this engine meets the applicability criteria in 40 CFR 60.4200(a)(2)(ii), i.e., this engine is a fire pump engine manufactured after July 1, 2006.

A. Pursuant to 40 CFR 60.4205(b), the fire pump engine is subject to and shall comply with the applicable emission standards identified in 40 CFR 89.112 and 89.113.

B. Pursuant to 40 CFR 60.4211(a), the Permittee shall operate and maintain the fire pump engine according to the manufacturer's written

instructions or procedures developed by the Permittee that are approved by the engine manufacturer. The Permittee shall also meet any applicable requirements of 40 CFR Parts 89, 94, and/or 1068 for the fire pump engine.

- C. Pursuant to 40 CFR 60.4207(b), the Permittee shall use diesel fuel that meets the requirements of 40 CFR 80.510(b) in the fire pump engine.
- D. The fire pump engine is not required to be equipped with diesel particulate filters, so that the NSPS monitoring requirements of 40 CFR 60.4209(b) for such devices do not apply.

b. The affected engines are subject to the federal NESHAP for Reciprocating Internal Combustion Engines, 40 CFR 63 Subpart ZZZZ. The Permittee must comply with applicable requirements of this NESHAP, if any, and related requirements of the General Provisions of the NESHAP, 40 CFR 63 Subpart A, if any.

- i. Pursuant to 40 CFR 63.6590(c), the engine for the fire pump, as well as any other affected engine that may be installed that meets applicability criteria in 40 CFR 60.4200 so is subject to the NSPS for SI RICE, 40 CFR 60 Subpart IIII, must meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of the NSPS, 40 CFR 60 Subpart IIII, and no further requirements apply to such engines under the NESHAP.

3.4.3 Applicable State Emission Standards

- a. The standard that addresses the opacity of the emission of smoke or other particulate matter from the affected engines is set forth in Condition 5.2.2(b), except as provided by 35 IAC 212.124(a).
- b.
 - i. The emission of SO₂ into the atmosphere from each affected engine shall not exceed 2,000 ppm pursuant to 35 IAC 214.301.
 - ii. Pursuant to 35 IAC 214.305, the sulfur content of all distillate fuel oil used by the affected engines shall not exceed 15 ppm. (State-Only Requirement)

3.4.4 Non-Applicability Provisions

- a. The affected engines are not subject to the requirements of the federal Acid Rain Program because they are not utility units. (Refer to 40 CFR 72.2 and 72.6.) Accordingly, electricity generated by the affected engines may not be sold to the power grid on a commercial basis.

- b. The affected engines that were manufactured before January 1, 2009 (the two engines for the emergency water circulation pumps, the two alternate water intake pumps and the two station emergency generators) are not subject to the NSPS for Compression Ignition Reciprocating Internal Combustion Engines (CI RICE), 40 CFR 60 Subpart IIII, because these engines were manufactured before the applicability date of this NSPS (January 1, 2009).
- c. The affected engines are not subject to the requirements of 35 IAC Part 212 Subpart L because a process weight rate cannot be set, due to the nature of such unit, so that these rules cannot reasonably be applied, pursuant to 35 IAC 212.323.
- d. Pursuant to 40 CFR 63.6590(b)(3)(iii), the engines for the emergency station generators do not have to meet the requirements of 40 CFR Part 63 Subpart A or Subpart ZZZZ, including initial notification requirements, because the engines are existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that do not operate and are not contractually obligated to be available for an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3, or for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

3.4.5 Work Practice and Operational Limitations

- a. For each affected engine, the Permittee shall operate and maintain a non-resettable hour meter, pursuant to the NESHAP, 40 CFR 63.6625(f), for the older smaller affected engines (the engines for the alternate water intake pumps and the water recirculation pumps), the NSPS, 40 CFR 60.4209(a), for the fire pump engine, and Section 39.5(7)(a) of the Act for the two engines for the station emergency generators.
- b. The affected engines shall not be operated for any purpose other than emergency operation and maintenance and operational testing, as follows, pursuant to the NESHAP, 40 CFR 63.6640(f), for the older smaller affected engines (the engines for the alternate water intake pumps and the water recirculation pumps), the NSPS, 40 CFR 60.4211(f), for the fire pump engine, and Section 39.5(7)(a) of the Act for the two engines for the station emergency generators:
 - i. Operation of each affected engine for maintenance checks and readiness testing shall be limited to 100 hours per calendar year.
 - ii. Each affected engine may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted toward the 100 hours per year provided

for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for the source to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situation for 50 hours per year is prohibited.

- c. Pursuant to the NESHAP, 40 CFR 63.6625(e) and Item 9 of Table 6 to NESHAP 40 CFR 63 Subpart ZZZZ, for the older smaller affected engines (the engines for the alternate water intake pumps and the water recirculation pumps), which are subject to substantive requirements of the NESHAP, the Permittee shall comply with the following work practice requirements:
 - i. Operate and maintain the engines according to the manufacturer's emission-related operation and maintenance instructions, or
 - ii. Develop and follow the Permittee's own maintenance plan which must to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practices for minimizing emissions.
- d. Pursuant to 40 CFR 63.6602 and Item 1 of Table 2c to 40 CFR 63 Subpart ZZZZ, for the older smaller affected engines (the engines for the alternate water intake pumps and the water recirculation pumps), which are subject to substantive requirements of the NESHAP, the Permittee shall comply with the following work practices:
 - i. Change the engine oil every 500 hours of operation or annually, whichever comes first.*

*The Permittee has the option to utilize an oil analysis program as described in 40 CFR 63.6625(j) in order to extend the specified oil change requirement.
 - ii. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.
 - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

3.4.6 Recordkeeping Requirements

- a. For each older, smaller affected engine (the engines for the alternate water intake pumps and the water recirculation pumps), the Permittee shall fulfill

applicable recordkeeping requirements of the NESHAP described in 40 CFR 63.6655(f).

- b. Pursuant to Section 39.5(7)(b) and (d) of the Act, for each affected engine, the Permittee shall maintain the following records:
 - i. Maintenance and repair records, listing each activity performed with date
 - ii. Records of the operating hours of the affected engine (engine-hours/month and engine-hours/calendar year) with date, time, duration, and purpose (i.e., exercise or emergency or maintenance need).
- c. For the fire pump engine, the Permittee shall also maintain file(s) containing the following:
 - i. Records as required by 40 CFR 60.4212(d).
 - ii. The manufacturer's specification for the engine's model year, maximum engine capacity and manufacturer's certification of compliance with 40 CFR Part 89 or Part 1039.
- d. Pursuant to 35 IAC 214.305, the Permittee shall maintain records demonstrating that the fuel oil used by the affected engine complies with the requirements of Condition 3.4.4(b)(ii), such as records from the fuel supplier indicating the sulfur content. (State-Only Requirement.)

3.4.7 Reporting Requirements

- a. For each older, smaller affected engine (the engines for the alternate water intake pumps and the water recirculation pumps), the Permittee shall fulfill applicable reporting requirements of the NESHAP, 40 CFR 63.6650.
- b. For the fire pump engine, the Permittee shall fulfill applicable reporting requirements of the NSPS, 40 CFR 60.4212 and 60.7.
- c. Pursuant to Section 39.5(7)(b) and (e) of the Act, if there is a deviation from the permit requirements for an affected engine, the Permittee shall report the deviation with the periodic compliance report for the coal-fired boiler.

4.0 EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Emission Control Equipment/Measures	Ref.*
Insignificant Activities		-	3.0
Boiler 1 NB-1	Coal-Fired Boiler	Low NO _x Burners, Overfire Air, Electrostatic Precipitator (ESP) with Flue Gas Conditioning (FGC), and Activated Carbon Injection (ACI)	7.1
Coal Handling Equipment	Coal Receiving, Transfer and Storage Operations	Enclosures and Covers, Dust Suppression, and Dust Collection Device	7.2
Fly Ash Handling Equipment	Ash Conveying Systems, Hoppers, Silos, and Loadout Operation	Dust Collection Devices, Dust Suppression, Enclosures and Covers	7.3
Gasoline Storage Tank	Gasoline Storage Tank with Submerged Loading Pipe	None	7.4
Note: The information and descriptions contained in this table are for informational purposes only and imply no limits or constraints.			

* Reference to Unit Specific Conditions in Section 7.

5.0 OVERALL SOURCE CONDITIONS

5.1 Applicability of Clean Air Act Permit Program (CAAPP)

- 5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of SO₂, CO, NO_x, VOM, PM, and HAP emissions.
- 5.1.2 This permit is issued based on the source requiring a CAAPP permit as an "affected source" for the purposes of Acid Deposition Control, Title IV of the Clean Air Act.
- 5.1.3 The source is considered a single source with Jasper Fuels Company, LLC, I.D. No. 079808AAC, located at 6725 North 500th Street, Newton, IL.

5.2 Applicable Regulations

- 5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.
- 5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability. Appropriate compliance procedures addressing these regulations are set forth for specific emission units in Section 7 of this permit:
 - a. i. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally towards the zenith (i.e., overhead) at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
 - ii. The Permittee shall conduct observations at the property line of the source for visible emissions of fugitive particulate matter from the source to address compliance with 35 IAC 212.301, upon request by the Illinois EPA, as follows: For this purpose, daily observations shall be conducted for a week for particular area(s) of concern at the source, as specified in the request. Observations shall begin either within one day or three days of receipt of a written request from the Illinois EPA, depending, respectively, upon whether observations will be conducted by employees of the Permittee or a third-party observer hired by the Permittee to conduct observations on its behalf. The Permittee shall keep records for these observations, including identity of the observer, the date and time of observations, the location(s) from which observations were made, and duration of any fugitive emissions event(s).

- b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) or 212.124.
- c. No person shall cause or allow the emission of smoke or other particulate matter into the atmosphere from any fuel combustion emissions unit for which construction or modification commenced on or after April 14, 1972, with actual heat input greater than 250 mmbtu/hr, having an opacity greater than 20 percent, pursuant to 35 IAC 212.122(a), except as allowed by 35 IAC 212.122(b) or 212.124.

5.2.3 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, including the following:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be appropriately certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.4 Risk Management Plan (RMP)

Should this stationary source, as defined in 40 CFR 68.3, become subject to the federal rules for Chemical Accident Prevention in 40 CFR Part 68, then the owner or operator shall submit:

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all applicable requirements of 40 CFR Part 68, including the registration and submission of the RMP, as part of the annual compliance certification required by Condition 9.8.

Note: This condition is imposed pursuant to 40 CFR 68.215(a).

5.2.5 Future Emission Standards

- a. Should this source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC Subtitle B after the date issued of this permit, the Permittee shall, in accordance with the applicable regulation(s), comply with the applicable

requirements by the date(s) specified and shall certify compliance or otherwise demonstrate initial compliance as provided by such regulation. Following the submittal of such a compliance certification or initial compliance demonstration, the Permittee shall address the applicable requirements of such regulation as part of the annual compliance certification required by Condition 9.8.

Note: This permit may also have to be revised or reopened to address such newly applicable regulations, as provided by Section 39.5(15)(a) of the Act. (See Condition 9.12.2.)

- b. This permit and the terms and conditions herein do not affect the Permittee's past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA. Further, neither the issuance of this permit nor any of the terms or conditions of the permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.

5.2.6 Episode Action Plan

- a. Pursuant to 35 IAC 244.141, the Permittee shall have on file with the Illinois EPA an approved Episode Action Plan for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The Episode Action Plan shall contain the information specified in 35 IAC 244.144.
- b. Pursuant to Section 39.5(7)(a) of the Act, the Episode Action Plan, as submitted by the Permittee on November 24, 2014, is incorporated herein by reference. Any revision to the plan submitted to Illinois EPA while this permit is in effect is automatically incorporated by reference, provided the revision is not expressly disapproved, in writing, by the Illinois EPA within 30 days of receipt of the revision. Upon such automatic incorporation, the revised plan replaces the version of the plan previously incorporated by reference.
- c. The plan incorporated by reference into this permit constitutes the approved Episode Action Plan required by 35 IAC 244.141, addressing the actions that will be implemented to reduce SO₂, PM₁₀, NO₂, CO and VOM emissions from various emissions units at the source in the event of a yellow alert, red alert or emergency issued under 35 IAC 244.161 through 244.165.
- d. Pursuant to 35 IAC 244.169, or as may otherwise be required under 35 IAC 244, Appendix D, the Permittee shall immediately implement the appropriate steps described in the approved Episode Action Plan upon receiving notice from the Illinois EPA.

- e. Pursuant to 35 IAC 244.143(d), if an operational change occurs at the source which invalidates the approved Episode Action Plan, a revised Episode Action Plan shall be submitted to the Illinois EPA for review and approval within 30 days of the change.
- f. Pursuant to Section 35 IAC 244.145(b), in the event that the Illinois EPA notifies the Permittee of a deficiency with any Episode Action Plan submitted pursuant to 35 IAC Part 244, the Permittee shall be required to revise and resubmit the Episode Action Plan within 30 days of receipt of notification to address the deficiency.
- g. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall keep a copy of the approved Episode Action Plan along with a record of activities completed according to the Episode Action Plan.

5.2.7 Control Measures Record

- a.
 - i. The Control Measures Record, as submitted by the Permittee on April 6, 2017, is incorporated herein by reference and constitutes the Control Measures Record required by Conditions 7.2.9(b) and 7.3.9(b).
 - ii. Any revised version of the Control Measures Record prepared by the Permittee and submitted to Illinois EPA while this permit term is in effect is automatically incorporated by reference into this permit, except as provided in 5.2.7(a)(iii). Upon such automatic incorporation, the revised plan replaces the version of the plan previously incorporated by reference.
 - iii. For any revisions to the Control Measures Record that relate to Rotary Railcar Dumper, Rotary Stacker Discharge to Storage Piles, Wind Erosion from Coal Storage Piles and Marketable and Non-Marketable Fly Ash load-out, the Permittee shall submit an appropriate permit application to incorporate by reference such revisions into the permit.
 - iv. In the event that within 30 days of receipt of a revised Control Measures Record the Illinois EPA notifies the Permittee in writing of any deficiency with the revision, then, within 30 days of such notice, the Permittee shall respond with relevant additional information or a further revision to the Control Measures Record.
- b. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep a copy of the Control Measures Record and any amendments or revisions to the Control Measures Record (as required by Conditions 7.2.9 and 7.3.9).

5.3 Intentionally Blank.

5.4 Intentionally Blank.

5.5 Intentionally Blank.

5.6 General Recordkeeping Requirements

5.6.1 Records for Emissions

The Permittee shall maintain records for the source to prepare its Annual Emission Report pursuant to 35 IAC 254.134

5.6.2 Retention and Availability of Records

The Permittee shall comply with the following requirements with respect to retention and availability of records pursuant to Sections 4(b) and 39.5(7)(a), (b), (e)(ii), (o)(v), and (p)(ii)(A) and (B) of the Act.

- a. All records required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be readily accessible to the Permittee, the Illinois EPA and USEPA, and made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. In response to an Illinois EPA or USEPA request made during the course of an inspection of the source, the Permittee shall retrieve and provide paper copies, or as electronic media, any records required by this permit that are retained in an electronic format (e.g., computer). Such response shall be provided at the time of the inspection; however, if the Permittee believes that the volume and nature of the requested material would make this overly burdensome, material shall be provided no later than 10 days thereafter unless a later date is agreed upon by the Permittee, Illinois EPA, and/or the USEPA.
- c. Upon written request by the Illinois EPA for copies of records or reports required to be kept by this permit, the Permittee shall promptly submit a copy of such material to the Illinois EPA. For this purpose, material shall be submitted to the Illinois EPA within 30 days unless additional time is provided by the Illinois EPA or the Permittee believes that the volume and nature of requested material would make this overly burdensome, in which case, the Permittee shall respond within 30 days with the explanation and a schedule for submittal of the requested material. (See also Condition 9.12.4.)

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

- a. For emissions units that are addressed by the unit-specific conditions of this permit, the timing for reporting of deviations shall be in accordance with such conditions.
- b. i. For other emissions units and activities at the source, the timing for reporting of deviations shall be in accordance with the provisions of relevant regulations if such provisions address timing of deviation reports.
- ii. Otherwise, if the relevant regulations do not address timing of deviation reports, deviation reports shall be submitted within 30 days.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year, as specified by 35 IAC Part 254 [Sections 4(b) and 39.5(7)(a), (b) and (f) of the Act].

5.8 Permitted Emissions for Fees

- a. The annual emissions from the source solely for purposes of Condition 9.4, not considering insignificant activities as addressed by Section 3, shall not exceed the following. [Section 39.5(18)(a)(ii) of the Act. (State-Only Requirement).]

<i>Pollutant</i>	<i>Tons/Year</i>
Volatile Organic Material (VOM)	130
Sulfur Dioxide (SO ₂)	10,000
Particulate Matter (PM)	350
Nitrogen Oxides (NO _x)	2,000
HAP, not included in VOM or PM (HAP)	60
Total	12,540

- b. The overall source emissions shall be determined by adding emissions of the above pollutants from all emission units (not including insignificant activities) on a calendar year basis. The Permittee shall maintain records of annual emissions for fee purposes. [Section 39.5(18)(a)(ii) of the Act. (State-Only Requirement).]

5.9 Transition

- a. As this revised permit establishes new compliance obligations for certain emission units that are not explicitly required by

rule, such as the visual surveys for coal storage pile operations in Condition 7.2.8(c), those obligations, including the associated recordkeeping and reporting, shall take effect 36 days after the issuance of this revised permit.

- b. The first quarterly report required by Condition 7.1.10-2(a) after the issuance of this revised permit must be submitted within 60 days after the end of the quarter in which the permit is issued.

6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS

6.1 Intentionally Blank.

6.2 Acid Rain Program

6.2.1 Applicability

Under Title IV of the CAA, Acid Deposition Control, this source is an affected source and the following emission unit at the source is an affected unit for acid deposition:

Newton Boiler 1 (NB-1)

Note: Title IV of the CAA and regulations promulgated thereunder, establish requirements for affected sources related to control of emissions of pollutants that contribute to acid rain. For purposes of this permit, these requirements are referred to as Title IV provisions.

6.2.2 Applicable Emission Requirements

The owners and operators shall not violate applicable Title IV provisions. In particular, NO_x emissions of the affected units shall not exceed the limit set by 40 CFR Part 76. SO₂ emissions of the affected unit shall not exceed any allowances that the source lawfully holds under Title IV provisions [Section 39.5(7)(g) and (17)(1) of the Act].

Note: Affected sources must hold SO₂ allowances to account for the SO₂ emissions from affected unit(s) at the source that are subject to Title IV provisions. Each allowance is a limited authorization to emit up to one ton of SO₂ emissions during or after a specified calendar year. The possession of allowances does not authorize exceedances of applicable emission standards or violations of ambient air quality standards.

6.2.3 Monitoring, Recordkeeping and Reporting

The owners and operators shall comply with applicable requirements for monitoring, recordkeeping and reporting specified by Title IV provisions, including 40 CFR Part 75 [Section 39.5(7)(b) and 17(m) of the Act].

Note: As further addressed by Section 7 of this permit, the following emission determination methods are currently being used for the affected unit at this source.

NO_x: Continuous Emissions Monitoring (40 CFR 75.12)
SO₂: Continuous Emissions Monitoring (40 CFR 75.11)
Opacity: Continuous Opacity Monitoring (40 CFR 75.14)

6.2.4 Acid Rain Permit

The owners and operators shall comply with the terms and conditions of the source's Acid Rain permit [Section 39.5(17)(1) of the Act].

Note: The source is subject to an Acid Rain permit, which was issued pursuant to Title IV provisions, including Section 39.5(17) of the Act. Affected sources must be operated in compliance with their Acid Rain permits. This source's Acid Rain permit is incorporated by reference into this permit and a copy of the current Acid Rain permit is included as Attachment 5 of this permit. Revisions and modifications of this Acid Rain permit, including administrative amendments and automatic amendments (pursuant to Sections 408(b) and 403(d) of the CAA or regulations thereunder) are governed by Title IV provisions, as provided by Section 39.5(13)(e) of the Act. Accordingly, revision or renewal of the Acid Rain permit may be handled separately from this CAAPP permit and a copy of the new Acid Rain permit may be included in this permit by administrative amendment.

6.2.5 Coordination with Other Requirements

- a. This permit does not contain any conditions that are intended to interfere with or modify the requirements of Title IV provisions (Section 39.5(17)(h) of the Act). In particular, this permit does not restrict the flexibility under Title IV provisions of the owners and operators of this source to amend their Acid Rain compliance plan [Section 39.5(13)(e) of the Act].
- b. Where another applicable requirement of the CAA is more stringent than an applicable requirement of Title IV provisions, both requirements are incorporated into this permit and are enforceable and the owners and operators shall comply with both requirements [Section 39.5(7)(h) of the Act].

6.3 Cross-State Air Pollution Rule (CSAPR)/Transport Rule (TR) Trading Programs

6.3.1 Applicability

The USEPA issued the Cross State Air Pollution Rule (CSAPR)*, also known as the Transport Rule (TR) in July 2011 to address CAA requirements concerning interstate transport of air pollution and to replace the previous Clean Air Interstate Rule (CAIR). For purposes of CSAPR, this source is a "TR NO_x Annual source," "TR NO_x Ozone Season source," and a "TR SO₂ Group 1 source." The following emission unit at this source is a "TR NO_x Annual unit," "TR NO_x Ozone Season unit" and "TR SO₂ Group 1 unit":

Newton Boiler NB-1

- * Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals, 76 FR 48208 (August 8, 2011); Federal Implementation Plans for Iowa, Michigan, Missouri, Oklahoma, and Wisconsin and Determination for Kansas Regarding Interstate Transport of Ozone, 76 FR 80760 (December 27, 2011); Revisions to Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone, 77 FR 10324 (February 21, 2012); Revisions to Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone, 77 FR 34830 (June 12, 2012).

6.3.2 Applicable Emission Requirements

a. TR NO_x Annual Emissions Requirements

- i. Pursuant to 40 CFR 97.406(c)(1), beginning January 1, 2015,
 - A. As of the allowance transfer deadline for a control period in a given year, the owner and operator shall hold, in the source's compliance account, TR NO_x Annual allowances available for deduction for such control period under 40 CFR 97.424(a) and 97.406(c)(3) in an amount not less than the tons of total NO_x emissions for such control period from Newton Boiler NB-1.
 - B. If total NO_x emissions during a control period in a given year from the TR NO_x Annual units at a TR NO_x Annual source are in excess of the TR NO_x Annual emissions limitation set forth in paragraph (a)(i)(A) above, then:
 - I. The owner and operator and each TR NO_x Annual unit at the source shall hold the TR NO_x Annual allowances required for deduction under 40 CFR 97.424(d); and
 - II. The owner and operator and each TR NO_x Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and

each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act.

- ii. Beginning January 1, 2017, if total NO_x emissions during a control period in a given year from all TR NO_x Annual units at TR NO_x Annual sources in Illinois exceed the Illinois assurance level, the owner and operator shall comply with the provisions of 40 CFR 97.406(c)(2).
- iii. Compliance periods.
 - A. A TR NO_x Annual unit shall be subject to the requirements under Condition 6.3.2(a)(i) for the control period starting on January 1, 2015, and for each control period thereafter [40 CFR 97.406(c)(3)(i)].
 - B. A TR NO_x Annual unit shall be subject to the requirements under Condition 6.3.2(a)(ii) above for the control period starting on January 1, 2017, and for each control period thereafter [40 CFR 97.406(c)(3)(ii)].
- iv. Vintage of allowances held for compliance.
 - A. A TR NO_x Annual allowance held for compliance with the requirements under Condition 6.3.2(a)(i)(A) for a control period in a given year must be a TR NO_x Annual allowance that was allocated for such control period or a control period in a prior year [40 CFR 97.406(c)(4)(i)].
 - B. A TR NO_x Annual allowance held for compliance with the requirements under Conditions 6.3.2(a)(i)(B) or 6.3.2(a)(ii) for a control period in a given year must be a TR NO_x Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year [40 CFR 97.406(c)(4)(ii)].
- v. Allowance Management System requirements. Each TR NO_x Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart AAAAA [40 CFR 97.406(c)(5)].
- vi. Limited authorization. A TR NO_x Annual allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:
 - A. Such authorization shall only be used in accordance with the TR NO_x Annual Trading Program [40 CFR 97.406(c)(6)].
- b. TR NO_x Ozone Season Emissions Requirements
 - i. Pursuant to 40 CFR 97.506(c)(1), beginning May 1, 2015,

- A. As of the allowance transfer deadline for a control period in a given year, the owner and operator shall hold, in the source's compliance account, TR NO_x Ozone Season allowances available for deduction for such control period under 40 CFR 97.524(a) and 97.506(c)(3) in an amount not less than the tons of total NO_x emissions for such control period from Newton Boiler NB-1.
- B. If total NO_x emissions during a control period in a given year from the TR NO_x Ozone Season units at a TR NO_x Ozone Season source are in excess of the TR NO_x Ozone Season emissions limitation set forth in Condition 6.3.2(b)(i)(A) above, then:
 - I. The owner and operator and each TR NO_x Ozone Season unit at the source shall hold the TR NO_x Annual allowances required for deduction under 40 CFR 97.524(d); and
 - II. The owner and operator and each TR NO_x Ozone Season unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart BBBBB and the Clean Air Act.
- ii. Beginning May 1, 2017, if total NO_x emissions during a control period in a given year from all TR NO_x Ozone Season units at TR NO_x Ozone Season sources in Illinois exceed the Illinois assurance level, the owner and operator shall comply with the provisions of 40 CFR 97.506(c)(2).
- iii. Compliance periods.
 - A. A TR NO_x Ozone Season unit shall be subject to the requirements under Condition 6.3.2(b)(i) for the control period starting on May 1, 2015, and for each control period thereafter [40 CFR 97.506(c)(3)(i)].
 - B. A TR NO_x Ozone Season unit shall be subject to the requirements under Condition 6.3.2(b)(ii) above for the control period starting on May 1, 2017, and for each control period thereafter [40 CFR 97.506(c)(3)(ii)].
- iv. Vintage of allowances held for compliance.
 - A. A TR NO_x Ozone Season allowance held for compliance with the requirements under Condition 6.3.2(b)(i)(A) for a control period in a given year must be a TR NO_x Annual allowance that was allocated for such control period or a control period in a prior year [40 CFR 97.506(c)(4)(i)].

- B. A TR NO_x Ozone Season allowance held for compliance with the requirements under Conditions 6.3.2(b)(i)(B) or 6.3.2(b)(ii) for a control period in a given year must be a TR NO_x Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year [40 CFR 97.506(c)(4)(ii)].
- v. Allowance Management System requirements. Each TR NO_x Ozone Season allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart BBBBB [40 CFR 97.506(c)(5)].
- vi. Limited authorization. A TR NO_x Ozone Season allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:
 - A. Such authorization shall only be used in accordance with the TR NO_x Ozone Season Trading Program [40 CFR 97.506(c)(6)].
- c. TR SO₂ Emissions Requirements
 - i. Pursuant to 40 CFR 97.606(c)(1), beginning January 1, 2015,
 - A. As of the allowance transfer deadline for a control period in a given year, the owner and operator shall hold, in the source's compliance account, TR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) and 97.606(c)(3) in an amount not less than the tons of total SO₂ emissions for such control period from Newton Boiler NB-1.
 - B. If total SO₂ emissions during a control period in a given year from the TR SO₂ Group 1 units at a TR SO₂ Group 1 source are in excess of the TR SO₂ Group 1 emissions limitation set forth in paragraph (c)(i)(A) above, then:
 - I. The owner and operator and each TR SO₂ Group 1 unit at the source shall hold the TR SO₂ Group 1 allowances required for deduction under 40 CFR 97.624(d); and
 - II. The owner and operator and each TR SO₂ Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart CCCCC and the Clean Air Act.

- ii. Beginning January 1, 2017, if total SO₂ emissions during a control period in a given year from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in Illinois exceed the Illinois assurance level, the owner and operator shall comply with the provisions of 40 CFR 97.606(c)(2).
- iii. Compliance periods.
 - A. A TR SO₂ Group 1 unit shall be subject to the requirements under Condition 6.3.2(c)(i) for the control period starting on January 1, 2015, and for each control period thereafter [40 CFR 97.606(c)(3)(i)].
 - B. A TR SO₂ Group 1 unit shall be subject to the requirements under Condition 6.3.2(c)(ii) above for the control period starting on January 1, 2017, and for each control period thereafter [40 CFR 97.606(c)(3)(ii)].
- iv. Vintage of allowances held for compliance.
 - A. A TR SO₂ Group 1 allowance held for compliance with the requirements under Condition 6.3.2(c)(i)(A) for a control period in a given year must be a TR SO₂ Group 1 allowance that was allocated for such control period or a control period in a prior year [40 CFR 97.606(c)(4)(i)].
 - B. A TR SO₂ Group 1 allowance held for compliance with the requirements under Conditions 6.3.2(c)(i)(B) or 6.3.2(c)(ii) for a control period in a given year must be a TR SO₂ Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year [40 CFR 97.606(c)(4)(ii)].
- v. Allowance Management System requirements. Each TR SO₂ Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart CCCCC [40 CFR 97.606(c)(5)].
- vi. Limited authorization. A TR SO₂ Group 1 allowance is a limited authorization to emit one ton of SO₂ during the control period in one year. Such authorization is limited in its use and duration as follows:
 - A. Such authorization shall only be used in accordance with the TR SO₂ Group 1 Trading Program [40 CFR 97.606(c)(6)].

6.3.3 Monitoring, Recordkeeping, and Reporting

- a. The owner and operator must submit to the USEPA Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53,

75.62 and 75.73, as applicable [40 CFR 97.434(b), 97.534(b) and 97.634(b)].

- b. For TR NO_x Annual emissions, the owner and operator shall comply with the continuous monitoring, recordkeeping, and reporting provisions specified in 40 CFR Part 97 Subpart AAAAA, and 40 CFR Part 75 Subpart H. These provisions include the calculation requirements specified at 40 CFR 97.406(b)(2); the recordkeeping and reporting requirements specified at 40 CFR 97.406(e); the general monitoring, recordkeeping, and reporting requirements specified at 40 CFR 97.430; the monitoring system certification and recertification requirements specified at 40 CFR 97.431; the monitoring system out-of-control requirements specified at 40 CFR 97.432; the notification requirements specified at 40 CFR 97.433; the recordkeeping and reporting requirements specified at 40 CFR 97.434; and the petitions for alternatives to monitoring, recordkeeping, or reporting requirements specified at 40 CFR 75.66 and 97.435.
- c. For TR NO_x Ozone Season emissions, the owner and operator shall comply with the continuous monitoring, recordkeeping, and reporting provisions specified in 40 CFR Part 97 Subpart BBBBB, and 40 CFR Part 75 Subpart H. These provisions include the calculation requirements specified at 40 CFR 97.506(b)(2); the recordkeeping and reporting requirements specified at 40 CFR 97.506(e); the general monitoring, recordkeeping, and reporting requirements specified at 40 CFR 97.530; the monitoring system certification and recertification requirements specified at 40 CFR 97.531; the monitoring system out-of-control requirements specified at 40 CFR 97.532; the notification requirements specified at 40 CFR 97.533; the recordkeeping and reporting requirements specified at 40 CFR 97.534; and the petitions for alternatives to monitoring, recordkeeping, or reporting requirements specified at 40 CFR 75.66 and 97.535.
- d. For TR SO₂ Group 1 emissions, the owner and operator shall comply with the continuous monitoring, recordkeeping, and reporting provisions specified in 40 CFR Part 97 Subpart CCCCC, and 40 CFR Part 75 Subparts B, F and G. These provisions include the calculation requirements specified at 40 CFR 97.606(b)(2); the recordkeeping and reporting requirements specified at 40 CFR 97.606(e); the general monitoring, recordkeeping, and reporting requirements specified at 40 CFR 97.630; the monitoring system certification and recertification requirements specified at 40 CFR 97.631; the monitoring system out-of-control requirements specified at 40 CFR 97.632; the notification requirements specified at 40 CFR 97.633; the recordkeeping and reporting requirements specified at 40 CFR 97.634; and the petitions for alternatives to monitoring, recordkeeping, or reporting requirements specified at 40 CFR 75.66 and 97.635.

6.3.4 Designated Representative and Alternate Designated Representative

Pursuant to 40 CFR 97.406(a), 40 CFR 97.506(a), and 40 CFR 97.606(a), the owners and operators shall comply with the requirement to have a

6.3 - Cross-State Air Pollution Rule (CSAPR)/Transport Rule (TR) Trading Programs

Designated Representative, and may also have an Alternate Designated Representative for Newton Boiler NB-1, in accordance with 40 CFR 97.413 through 418 for the TR NO_x Annual Trading Program; 40 CFR 97.513 through 518 for the TR NO_x Ozone Season Trading Program; and 40 CFR 97.613 through 618 for the TR SO₂ Group 1 Trading Program.

6.3.5 Coordination with Other Requirements

- a. Any provision of the TR NO_x Annual or Ozone Season or TR SO₂ Group 1 Trading Program that applies to a source or the designated representative shall also apply to the owners and operators of such source and the TR NO_x Annual or Ozone Season or TR SO₂ Group 1 unit at the source. [40 CFR 97.406(f)(1), 97.506(f)(1) and 97.606(f)(1)].
- b. Any provision of the TR NO_x Annual or Ozone Season or TR SO₂ Group 1 Trading Program that applies to a TR NO_x Annual or Ozone Season or TR SO₂ Group 1 unit or the designated representative shall also apply to the owners and operators of such unit. [40 CFR 97.406(f)(2), 97.506(f)(2) and 97.606(f)(2)].
- c. This permit does not contain any conditions that are intended to interfere with or modify the requirements of the Transport Rule, 40 CFR Part 97 Subparts AAAAA, BBBB or CCCCC.
- d. Where another applicable requirement of the CAA is more stringent than an applicable requirement of 40 CFR Part 97 Subparts AAAAA, BBBB, or CCCCC, both requirements are incorporated into this permit and are enforceable and the owners and operators of the source shall comply with both requirements. [Section 39.5(7)(h) of the Act].
- e. No revision of this CAAPP permit is required for any allocation, holding, deduction, or transfer of TR NO_x Annual or Ozone Season or TR SO₂ Group 1 allowances in accordance with 40 CFR Part 97 Subparts AAAAA, BBBB, or CCCCC [40 CFR 97.406(d)(1), 97.506(d)(1) and 97.606(d)(1)].

6.3.6 Effect on Other Authorities

No provision of the TR NO_x Annual or Ozone Season or TR SO₂ Group 1 Trading Programs or exemption under 40 CFR 97.405, 97.505 or 96.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO_x Annual or Ozone Season or TR SO₂ Group 1 source or unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act [40 CFR 97.406(g), 97.506(g) and 97.606(g)].

6.4 Control of Mercury Emissions from Coal-fired Electric Generating Units and Multi-pollutant Standard (MPS) Requirements for NO_x and SO₂

6.4.1 Description

The purpose of 35 IAC Part 225 Subpart B is to limit the emissions of mercury, nitrogen oxides and sulfur dioxide from coal-fired EGUs operating in Illinois. Compliance with the limitations is demonstrated using continuous monitoring systems.

Note: The description in Condition 6.4.1 is for informational purposes only and implies no limits or constraints.

6.4.2 List of Emission Units

The EGUs associated with the following emission unit at the source is an affected EGU for the purpose of 35 IAC Part 225 Subpart B:

Newton Boiler 1 (NB-1)

The Newton Power Station is part of the MPS Group as described in the notice of intent submitted to the Illinois EPA in accordance with 35 IAC 225.233(b), which establishes control requirements and standards for emissions of NO_x, SO₂, and mercury. The MPS Group consists of the Coffeen, Duck Creek, Edwards, Joppa and Newton Power Stations. Portions of the Illinois Mercury Rule relating to mercury emissions have not been approved in the SIP and therefore will be designated in this permit as "State-Only Requirements".

6.4.3 Emission Standards for EGUs

- a. Pursuant to 35 IAC 225.233(d)(1), the Permittee shall comply with one of the following mercury standards for the affected EGU, calculated in accordance with 35 IAC 225.230(a) or (d), on a rolling 12-month basis (State-Only Requirement):
 - i. An emission standard of 0.0080 lb mercury/GWh gross electrical output, provided that the Permittee monitors and records gross electrical output in accordance with 35 IAC 225.263 and 35 IAC 225.290(a)(2)(B); or
 - ii. A minimum 90-percent reduction of input mercury, provided that the Permittee conducts the necessary fuel sampling, analysis and recordkeeping in accordance with 35 IAC 225.265.
- b. Pursuant to 35 IAC 225.233(e)(3)(C)(iv), for the EGUs in the MPS Group, the Permittee must comply with an overall SO₂ annual emission rate of 0.23 lb/mmBtu.
- c. i Pursuant to 35 IAC 225.233(e)(1)(A) and (e)(3)(B)(iii), for the EGUs in the MPS Group, the Permittee must comply with an overall NO_x annual emission rate of no more than 0.11 lb/million Btu.

6.4 - Control of Mercury Emissions from Coal-fired Electric Generating Units

- ii. Pursuant to 35 IAC 225.233(e)(1)(B) and (e)(3)(B)(i), for the EGUs in the MPS Group, the Permittee must comply with an overall NOx seasonal emission rate of no more than 0.11 lb/million Btu.

6.4.4 Monitoring

- a. The Permittee shall install, operate and maintain monitoring systems required pursuant to 35 IAC 225.240 through 225.270 for monitoring mercury mass emissions (including the systems required to monitor mercury concentration, stack gas moisture content, stack gas flow rate, and CO₂ or O₂ concentration, as applicable, in accordance with Sections 1.15 or 1.16 of 35 IAC 225. Appendix B) (State-Only Requirement).
- b. The applicable monitoring requirements for SO₂ and NOx emissions from the affected boiler are set forth in Condition 7.1.8(b) through (d).

6.4.5 Recordkeeping

- a.
 - i. Pursuant to 35 IAC 225.290(a)(2), the Permittee shall maintain records for each month identifying the mercury emission standard in Condition 6.4.3(a) used to demonstrate compliance or that is applicable for the affected EGU and the records, as specified in 35 IAC 225.290(a)(2). (State-Only Requirement).
 - ii. The Permittee shall maintain records of the following data (State-Only Requirement):
 - A. Monthly emissions of mercury from the affected EGU.
 - B. If the affected EGU is complying by means of 35 IAC 225.230(d), records of the monthly allowable emissions of mercury from the EGU.
 - iii. The Permittee shall maintain records related to quality assurance activities conducted for emissions monitoring systems pursuant to Section 2.2 of 35 IAC 225. Exhibit B. (State-Only Requirement)
 - iv. The Permittee shall prepare and maintain a Mercury Emissions Monitoring Plan as specified in Section 1.10 of 35 IAC Part 225. Appendix B. (State-Only Requirement)

6.4.6 Reporting

- a. Reporting related to mercury emissions:
 - i. Quarterly Reports. For any affected EGU using CEMS or excepted monitoring systems at any time during a calendar quarter, the Permittee shall submit quarterly reports and compliance certifications to the Illinois EPA as required by 35 IAC 225.290(b) and (c) (State-Only Requirement).

6.4 - Control of Mercury Emissions from Coal-fired Electric Generating Units

- ii. Annual Certification of Compliance. The Permittee shall submit to the Agency an Annual Certification of Compliance with 35 IAC Part 225 Subpart B no later than May 1 of each year, addressing compliance for the previous calendar year, as required by 35 IAC 225.290(d) (State-Only Requirement).
 - iii. Deviation Reports. For the affected EGU, the Permittee shall promptly notify the Agency of deviations from requirements of 35 IAC Part 225 Subpart B, as required by 35 IAC 225.290(e). These notifications must include a description of such deviations within 30 days after discovery of the deviations, and a discussion of the possible cause of such deviations, any corrective actions, and any preventative measures taken (State-Only Requirement).
 - iv. Quality Assurance RATA Reports. The Permittee shall submit to the Agency, Air Compliance and Enforcement Section, the quality assurance RATA report for the EGU pursuant to Section 1.18(d)(4) of 35 IAC Part 225. Appendix B, within 45 days after completing a quality assurance RATA (State-Only Requirement).
- b. i. Compliance with the NO_x and SO₂ emission standards must be demonstrated in accordance with 35 IAC 225.310, 225.410, and 225.510. The Permittee of the EGUs in the MPS group must complete the demonstration of compliance pursuant to 35 IAC 225.233(e)(4) before March 1 of the following year for annual standards and before November 30 of the particular year for ozone season control periods (May 1 through September 30) standards, by which date a compliance report must be submitted to the Illinois EPA.
- A. For the annual period beginning on January 1, 2017 and all annual periods continuing thereafter,
 - I. Compliance with the NO_x standard in Condition 6.4.3(c)(i), and
 - II. Compliance with the SO₂ standard in Condition 6.4.3(b).
 - B. For the seasonal periods, compliance with the NO_x standard in Condition 6.4.3(c)(ii).
- ii. Each compliance report shall contain the following information for the applicable reporting period which shall be based on recordkeeping required by the applicable provisions of 40 CFR Part 75 Subparts F, G and H, as set forth in Conditions 7.1.9(f), (g) and (h).
 - A. NO_x and SO₂ average emission rate, (lb/mmBtu) for each individual Power Station in the MPS group and the overall total for the MPS group,

6.4 - Control of Mercury Emissions from Coal-fired Electric Generating Units

- B. NO_x and SO₂ emissions, (tons) for each Power Station in the MPS group, and
- C. Heat input, (mmBtu) for each Power Station in the MPS group.

6.5 Mercury and Air Toxics Standard (MATS) (40 CFR Part 63, Subpart UUUUU)

6.5.1 Description

On December 16, 2011, the United States Environmental Protection Agency (USEPA) signed a rule to limit emissions of hazardous air pollutants from power plants. Specifically, these mercury and air toxics standards (MATS) for power plants limit emissions from new and existing coal and oil-fired electric utility steam generating units (EGUs).

The rule establishes numeric emission standards for non-mercury HAP metals, mercury, and non-organic acid gases. It also establishes surrogate emission standards, including SO₂ (as a surrogate for non-organic acid gases), and filterable PM (as a surrogate for non-mercury HAP metals).

The standards set work practices for emissions of organic HAPs, including dioxin/furan. The work practice standards require periodic tune-ups for each unit that involves inspection, adjustment, and/or maintenance and repairs (if necessary) to ensure efficient combustion.

Note: The description in Condition 6.5.1 is for informational purposes only and implies no limits or constraints.

6.5.2 Applicability Provisions

The affected source, as specified below, is an "affected electric utility steam generating unit (EGU)" for the purposes of the National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units, pursuant to 40 CFR 63.9981 and 40 CFR 63.9982(a)(1), because the permittee owns or operates a coal fired EGU as defined at 40 CFR 63.10042. This affected EGU is subject to the applicable requirements of the NESHAP, 40 CFR Part 63 Subpart UUUUU, and related requirements in the NESHAP General Provisions, 40 CFR Part 63, Subpart A.

Unit 1 (NB-1)

The affected EGU is in the subcategory of existing EGUs designed for coal with a heating value greater than or equal to 8300 Btu/lb [40 CFR 63.9990].

6.5.3 Applicable Requirements

a. Unless the affected unit complies with the LEE requirements in Condition 6.5.9(b) or alternative requirements in Conditions 6.5.9(c) or (d), the Permittee shall comply with the following applicable requirements:

i. For non-mercury HAP metals,

A. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, emissions from the affected EGU shall comply with one of the following limits:

- I. Emissions of total non-Hg HAP metals from the affected EGU shall not exceed, as a 30-boiler operating day rolling average:
 - a. 0.000050 lb/mmBtu (mass per heat input); or
 - b. 0.50 lb/GWh (mass per gross output).
 - II. As an alternative to the standard in Condition 6.5.3(a)(i)(A)(I), the Permittee may elect to comply with the standard for individual non-mercury HAP metals, or filterable PM, as set forth in Condition 6.5.9(c).
- ii. For mercury,
- A. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, for affected EGUs not using emissions averaging, emissions of mercury from the affected EGU shall not exceed, as a 30-boiler operating day rolling average:
 - I. 1.2 lb/TBtu (mass per heat input); or
 - II. 0.013 lb/GWh (mass per gross output).
 - B. Pursuant to 40 CFR 63.10009(a)(2), if the Permittee is using emissions averaging for mercury, emissions from the affected EGU shall not exceed, as a 90-group boiler operating day rolling average:
 - I. 1.0 lb/TBtu (mass per heat input); or
 - II. 0.011 lb/GWh (mass per gross output).
- iii. For acid gases,
- A. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, emissions from the affected EGU shall comply with one of the following limits:
 - I. Emissions of Hydrogen Chloride shall not exceed, as a 30-boiler operating day rolling average:
 - a. 0.0020 lb/mmBtu (mass per heat input); or
 - b. 0.020 lb/MWh (mass per gross output).
 - II. As an alternative to the standard in Condition 6.5.3(a)(iii)(A)(I), the Permittee may elect to comply with the standard for SO₂ as set forth in Condition 6.5.9(d).
 - b. The Permittee may use the emissions averaging provisions of 40 CFR 63.10009 and 40 CFR 63.10022 to demonstrate compliance with

6.5 - Mercury and Air Toxics Standard (MATS) (40 CFR Part 63, Subpart UUUUU)

the emission standards specified in Conditions 6.5.3(a)(i), (ii)(B), and (iii).

- c. If the Permittee elects to switch from heat input based limits to gross output based limits (or vice-versa) in Condition 6.5.3(a) or to an alternate emission standard or provision in Conditions 6.5.9(c) through (e), the Permittee shall comply with the Notification of Compliance Status requirements in Condition 6.5.9(a).
- d. Pursuant to 40 CFR 63.10000(b), at all times the Permittee must operate and maintain the affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
- e. Performance Tune-up Work Practices:

Pursuant to 40 CFR 63.9991(a)(1), and item 1 of Table 3 to Subpart UUUUU of 40 CFR Part 63, the Permittee shall conduct a tune-up of the EGU burner and combustion controls at least every 36 calendar months, or each 48 months if neural network combustion optimization software is employed, as specified at 40 CFR 63.10021(e).

6.5.4 Applicable Monitoring and Testing Requirements

- a. Unless the affected unit complies with the LEE requirements in Condition 6.5.9(b) or alternative requirements in Conditions 6.5.9(c) or (d), the Permittee shall comply with the following applicable requirements:

- i. For non-mercury HAP metals,

Pursuant to 40 CFR 63.10000(c)(1)(iv), in order to demonstrate compliance with the total non-Hg HAP metals emission standard specified in Condition 6.5.3(a)(i)(A), the Permittee shall monitor continuous performance through performance testing repeated quarterly.

- ii. For mercury,

The Permittee shall monitor emissions of mercury from the affected EGU using a sorbent trap monitoring system in accordance with 40 CFR 63.10010(g), 40 CFR 63.10020(a) through (d), and Appendix A to 40 CFR Part 63 Subpart UUUUU.

- iii. For Acid Gases,

Pursuant to 40 CFR 63.10000(c)(1)(v), to demonstrate compliance with the HCl emission limit specified in Condition 6.5.3(a)(iii), if the affected source does not use an HCl continuous emission monitoring system (HCl CEMS), the Permittee shall demonstrate continuous compliance through HCl performance testing repeated quarterly.

iv. For Continuous Monitoring Systems,

- A. The Permittee shall comply with the provisions of 40 CFR 63.10010(b), (c) and (d), and 40 CFR 63.10020(a) through (d) regarding CO₂ CEMS, stack gas flow rate monitoring, and stack gas moisture content.
- B. Pursuant to 40 CFR 63.10007(f), since the Permittee uses a continuous monitoring system to monitor emissions of mercury, the Permittee may use the diluent cap and default gross output values as specified at 40 CFR 63.10007(f)(1) and (2) in emission rate calculations during startup and shutdown periods.

6.5.5 General Testing Requirements

- a. Pursuant to 63.10021(a), the Permittee shall conduct all performance testing in accordance with the requirements of 40 CFR 63.10007 and item 1 in Table 2, Table 5, and item 4 in Table 7 to Subpart UUUUU of 40 CFR Part 63.

6.5.6 General Recordkeeping Requirements

- a. The Permittee shall keep copies of any information and reports submitted to comply with the requirements of 40 CFR Part 63 Subpart UUUUU, and copies of any performance stack tests, CMS performance evaluations, and compliance demonstrations as specified at 40 CFR 63.10032(a).
- b. The Permittee shall keep records for any CMS as specified at 40 CFR 63.10032(b) and 40 CFR 63.10(c).
- c. The Permittee shall keep records of any monitoring data as specified at 40 CFR 63.10032(c) and 63.10(b)(2)(vii) through (ix).
- d. The Permittee shall keep records of any monthly fuel use, non-hazardous secondary materials combusted, and information for an affected EGU qualifying as a LEE unit as specified at 40 CFR 63.10032(d).
- e. The Permittee shall keep records for any emissions averaging as specified at 40 CFR 63.10032(e).
- f. The Permittee shall keep records regarding any startup or shutdown periods as specified at 40 CFR 63.10032(f) and (i).
- g. The Permittee shall keep records regarding any equipment malfunctions as specified at 40 CFR 63.10032(g) and (h).

- h. The Permittee shall keep records of any maintenance performed on air pollution control and monitoring equipment as specified at 40 CFR 63.10(b)(2)(iii).
- i. The Permittee shall keep records of any continuous monitoring system malfunctions and inoperative periods as specified at 40 CFR 63.10(b)(2)(vi).
- j. The Permittee shall keep records of any periods of monitored excess emissions as specified at 40 CFR 63.10(c)(7) and (8).
- k. The Permittee shall keep sorbent trap monitoring systems and other CMS system records as specified in Section 7.1 of Appendix A to 40 CFR Part 63 Subpart UUUUU.
- l. Pursuant to 40 CFR 63.10033 and 40 CFR 63.10(b)(1), the Permittee shall keep any required records on site for at least the first two years, but may be kept off-site after the first two years.

6.5.7 Reporting Requirements

- a. Pursuant to 40 CFR 63.10030(a), the Permittee shall submit the following notifications, as applicable, in accordance with the specified regulatory provision(s):
 - i. Periodic Test Notifications, as specified at 40 CFR 63.7(b), 40 CFR 63.9(e), and 63.10030(d), to be submitted at least 30 days before the test is scheduled to begin.
 - ii. Continuous Monitoring System Performance Evaluation Notices, as specified at 40 CFR 63.8(e).
 - iii. Alternative Monitoring Requests, as specified at 40 CFR 63.8(f)(4).
 - iv. Alternative RATA Requests, as specified at 40 CFR 63.8(f)(6).
 - v. Special Compliance Requirements Notices, as specified at 40 CFR 63.9(d).
 - vi. Additional CMS Notifications, as specified at 40 CFR 63.9(g).
 - vii. Notifications of Compliance Status, as specified at 40 CFR 63.9(h), 40 CFR 63.10030(e) and Condition 6.5.9(a)(i).
- b. Pursuant to 40 CFR 63.10031(b), the Permittee shall submit a Semiannual Compliance Report no later than January 31 and July 31 of each year. Each Semiannual Compliance Report shall contain the information specified at 40 CFR 63.10031(c) through (d) and (g).
 - i. Pursuant to 40 CFR 63.10031(e), the Permittee shall report deviations from the applicable requirements of 40 CFR Part 63 Subpart UUUUU (as defined at 40 CFR 63.10042) in the Semiannual Compliance Report.

- c. Pursuant to 40 CFR 63.10031(f) and 40 CFR 63.10(d)(1) and (2), the Permittee shall submit reports of performance tests and CEMS performance evaluations required by 40 CFR Part 63 Subpart UUUUU no later than 60 days after completion.
- d. The Permittee shall comply with any applicable reporting requirements for mercury CEMS and sorbent trap monitoring systems specified at Sections 7.2.1 through 7.2.4 of Appendix A to 40 CFR Part 63 Subpart UUUUU.
- e. Pursuant to Section 7.2.5 of Appendix A to 40 CFR Part 63 Subpart UUUUU, the Permittee shall submit any required mercury CEMS and sorbent trap monitoring system data quarterly within 30 days after the end of each calendar quarter, using the ECMPs Client Tool.
- f. The Permittee shall comply with any applicable reporting requirements for HCl CEMS specified at Sections 11.1 through 11.4 of Appendix B to 40 CFR Part 63 Subpart UUUUU.
- g. Pursuant to Section 11.5 of Appendix B to 40 CFR Part 63 Subpart UUUUU, the Permittee shall submit any required HCl CEMS data quarterly within 30 days after the end of each calendar quarter, using the ECMPs Client Tool.

6.5.8 Startup/Shutdown Provisions

- a. Pursuant to 40 CFR 63.9991(a)(1) and 40 CFR 63.10021(h), the Permittee shall comply with the control device operation, fuel usage, monitoring, recordkeeping, and reporting requirements specified in items 3 and 4 of Table 3 to Subpart UUUUU of 40 CFR Part 63 during startup periods and shutdown periods (as those terms are defined at 40 CFR 63.10042) of the affected EGU.
 - i. The Permittee has elected to use paragraph (1) of the definition of "startup" in 40 CFR 63. 63.10042, and must therefore operate all CMS during startup and use "clean fuels" as defined at 40 CFR 63.10042 for ignition.
 - ii. Pursuant to 40 CFR 63.10030(e)(8)(iii), the Permittee may switch from paragraph (1) of the definition of "startup" in 40 CFR 63.10042 to paragraph (2) of the definition of "startup" (or vice-versa), provided that the Permittee follows the procedure specified at 40 CFR 63.10030(e)(8)(iii)(A) through (E).
 - iii. Pursuant to 40 CFR 63.10030(e)(8)(i), should the Permittee choose to rely on paragraph (2) of the definition of "startup" in 40 CFR 63.10042 for the EGU, the Permittee shall submit a report that identifies the EGU and PM control device design characteristics and other information as specified at 40 CFR 63.10030(e)(8)(i)(A) through (K) that shall be prepared, signed, and sealed by a professional engineer licensed in Illinois.

6.5.9 Alternative Requirements

a. Notification Requirements:

Pursuant to Section 39.5(7)(b) of the Act and 40 CFR 63.10030(e)(8)(iii)(A),

- i. If the Permittee elects to change from compliance with a mass per heat input basis emission limit (e. g., lb/mmBtu) to a mass per gross output basis emission limit (e. g., lb/GW-hr), or vice-versa, the Permittee shall comply with the requirements specified at 40 CFR 63.10030(e)(7)(iii)(A) through (C).
- ii. If the Permittee elects to switch from the paragraph (1) definition of startup at 40 CFR 63.10042 to the paragraph (2) definition of startup, or vice-versa, the Permittee shall comply with the requirements specified at 40 CFR 63.10030(e)(8)(iii)(A) through (E).
- iii. If the Permittee elects to change other 40 CFR Part 63 Subpart UUUUU compliance demonstration methods as described by Condition 6.5.9(b) through (e) that renders the compliance demonstration methodology information contained in the most recently-submitted Notification of Compliance Status incorrect, the Permittee shall submit an advance notice to Illinois EPA at least 60 days prior to implementing the change. In the advance notice, the Permittee shall include the information necessary for Illinois EPA to determine the applicable requirements pertaining to the change, and any relevant performance test results necessary to demonstrate compliance with the new method, if applicable. The Permittee shall comply with written directives issued by Illinois EPA in response to such advance notice, and may proceed with implementing the change if not directed otherwise in writing by Illinois EPA within 45 days after submission of the change notice. The Permittee shall also comply with applicable requirements to submit a revised Notification of Compliance Status to Illinois EPA no later than 60 days following the change.

b. Low Emitting EGU (LEE) Alternative Requirements:

i. LEE Status for mercury (Hg):

The EGU may qualify for LEE status for Hg if the Permittee collects performance test data that meet the requirements of 40 CFR 63.10005(h), and if those data demonstrate:

A. For Hg emissions from an existing EGU, either:

- I. Average emissions less than 10 percent of the applicable Hg emissions limit in Table 2 to 40 CFR Part 63 Subpart UUUUU (expressed either in units of lb/TBtu or lb/GWh); or

II. Potential Hg mass emissions of 29.0 or fewer pounds per year and compliance with the applicable Hg emission limit in Table 2 to 40 CFR Part 63 Subpart UUUUU (expressed either in units of lb/TBtu or lb/GWh).

B. If test data demonstrate that the affected EGU qualifies for LEE status for the mercury emission standard specified in Condition 6.5.3(a)(ii) by satisfying the LEE criteria specified at 63.10005(h)(1)(ii), the Permittee shall conduct performance testing as specified at 63.10005(h)(3) at least once every 12 calendar months, as specified at 40 CFR 63.10000(c)(1)(ii).

C. Pursuant to 40 CFR 63.10006(b)(2), if subsequent emission test results show that the affected EGU no longer satisfies the criteria for LEE status, the Permittee shall install, certify, operate, and maintain a mercury CEMS or sorbent trap monitoring system in accordance with Appendix A to 40 CFR Part 63 Subpart UUUUU within 6 months of losing LEE eligibility, and conduct quarterly mercury emissions testing until the mercury CEMS or sorbent trap monitoring system is installed, certified, and operating.

ii. LEE Status for HCl, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals:

The EGU may qualify for LEE status for HCl, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals if the Permittee collects performance test data that meet the requirements of 40 CFR 63.10005(h), and if those data demonstrate:

A. For HCl, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals, performance test emissions results less than 50 percent of the applicable emissions limits in Table 2 to 40 CFR Part 63, Subpart UUUUU for all required testing for 3 consecutive years.

B. If test data demonstrates that the affected EGU qualifies for LEE status for total non-Hg HAP metals, individual non-Hg HAP metals, filterable particulate matter, or HCl standards specified in Conditions 6.5.3(a)(i)(A)(I), 6.5.9(c)(i)(A)(II), 6.5.9(c)(i)(A)(I), or 6.5.3(a)(iii)(A)(I), respectively, by satisfying the LEE criteria specified at 63.10005(h)(1) and (2), the Permittee shall conduct a performance test at least once every 36 calendar months, as specified at 40 CFR 63.10000(c)(1)(iii).

C. Pursuant to 40 CFR 63.10006(b)(1), if subsequent emission test results show that the affected EGU no longer satisfies the criteria for LEE status, the

Permittee shall resume conducting quarterly stack testing for total non-Hg HAP metals, individual non-Hg HAP metals, filterable PM, or HCl or shall install, certify, and operate a PM CEMS, HCl CEMS, SO₂ CEMS, or PM CPMS, as applicable.

c. i. Non-mercury HAP Metals Alternative Requirements:

A. The Permittee may elect to comply with a filterable PM or individual non-mercury HAP metals standard as an alternative to the total non-mercury HAP metals standard set forth in Condition 6.5.3(a)(i). Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, for affected EGUs not satisfying the criteria for LEE status, the Permittee may elect to comply with one of the following limits either individually or using the applicable emissions averaging provisions of 40 CFR 63.10009 and 63.10022:

- I. Emissions of filterable PM from the affected EGU shall not exceed, as a 30-boiler operating day rolling average, 0.030 lb/mmBtu (mass per heat input) or 0.30 lb/MWh (mass per gross output); or
- II. Emissions of individual non-Hg HAP metals (Sb, As, Be, Cd, Cr, Co, Pb, Mn, Ni, Se) shall not exceed, as a 30-boiler operating day rolling average, the following limits specified in Table 2 to Subpart UUUUU of 40 CFR Part 63:

Pollutant:	Emission Limit (Mass Per Heat Input):	OR	Emission Limit (Mass Per Gross Output):
Antimony (Sb)	0.80 lb/TBtu	OR	0.0080 lb/GWh
Arsenic (As)	1.1 lb/TBtu	OR	0.020 lb/GWh
Beryllium (Be)	0.20 lb/TBtu	OR	0.0020 lb/GWh
Cadmium (Cd)	0.30 lb/TBtu	OR	0.0030 lb/GWh
Chromium (Cr)	2.8 lb/TBtu	OR	0.030 lb/GWh
Cobalt (Co)	0.80 lb/TBtu	OR	0.0080 lb/GWh
Lead (Pb)	1.2 lb/TBtu	OR	0.020 lb/GWh
Manganese (Mn)	4.0 lb/TBtu	OR	0.050 lb/GWh
Nickel (Ni)	3.5 lb/TBtu	OR	0.040 lb/GWh
Selenium (Se)	5.0 lb/TBtu	OR	0.060 lb/GWh

ii. Non-mercury HAP Metals Alternative Monitoring Provisions:

- A. If the Permittee elects to demonstrate compliance with the filterable particulate matter emission limit specified in Condition 6.5.9(c)(i)(A)(I) using PM CEMS, the Permittee shall install, certify, operate, and maintain the PM CEMS in accordance with the requirements specified at 40 CFR 63.10010(i) and 40 CFR 63.10020(a) through (d).

- B. If the Permittee elects to demonstrate compliance with the filterable particulate matter emission limit specified in Condition 6.5.9(c)(i)(A)(I) using PM CPMS, the Permittee shall install, certify, operate, and maintain the PM CPMS in accordance with the requirements specified at 40 CFR 63.10010(h) and 40 CFR 63.10020(a) through (d), and Table 6 to 40 CFR Part 63, Subpart UUUUU.

d. i. Acid Gases Alternative Emission Standards:

- A. The Permittee may elect to comply with a standard for emissions of SO₂ as an alternative the HCl standards set forth in Condition 6.5.3(a)(iii)(A) if the Permittee has a system using wet or dry flue gas desulfurization technology and SO₂ continuous emissions monitoring system (CEMS) installed on the unit. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, for the EGU not satisfying the criteria for LEE status, the Permittee may elect to comply with the following limit, either individually or using the applicable emissions averaging provisions of 40 CFR 63.10009 and 63.10022:

- I. Emissions of SO₂ shall not exceed, as a 30-boiler operating day rolling average, 0.20 lb/mmBtu (mass per heat input) or 1.5 lb/MWh (mass per gross output).

- B. Pursuant to 40 CFR 63.9991(c)(2), if the Permittee is complying with the SO₂ limit in Condition 6.5.9(d)(i)(A)(I), the Permittee must, at all times, operate the wet or dry flue gas desulfurization technology and the SO₂ CEMS installed on the affected units consistent with 40 CFR 63.10000(b).

ii. Acid Gases Alternative Monitoring Provisions:

If the Permittee elects to demonstrate compliance with the HCl emission limit specified in Condition 6.5.9(a)(iii)(A) using an HCl CEMS, the Permittee shall install, certify, operate, and maintain the HCl CEMS in accordance with the requirements specified at 40 CFR 63.10010(e), 40 CFR 63.10020(a) through (d), and Appendix B to 40 CFR Part 63 Subpart UUUUU.

e. Mercury Alternative Monitoring Provisions:

The Permittee may elect to monitor emissions of mercury from the affected EGU using a mercury CEMS monitoring system in accordance with 40 CFR 63.10010(g), 40 CFR 63.10020(a) through (d), and Appendix A to 40 CFR Part 63 Subpart UUUUU, as an alternative to a sorbent trap monitoring system, as described in Condition 6.5.4(a)(ii).

7.0 UNIT SPECIFIC CONDITIONS

7.1 Coal Fired Boiler

7.1.1 Description

The Permittee has one coal-fired boiler for electric generation. The boiler is capable of operating in baseload or load-following modes, and typically operates for weeks at a time between startups. The boiler, which was built in 1972, has a nominal capacity of 6,000 mmBtu/hour and is served by a single stack. This boiler also has the capability to fire a combination of coal and fuel oil as its principal fuel. The boiler also fires fuel oil as auxiliary fuel during startup and for flame stabilization. Periodically small amounts of used oil may be fired with the coal in this boiler.

Nitrogen oxide (NO_x) emissions from the boiler are controlled by low-NO_x burners and overfire air systems. Particulate matter (PM) emissions are controlled by electrostatic precipitators (ESP) equipped with Flue Gas Conditioning (FGC) systems. The FGC systems inject SO₃ upstream of the ESP and is operated on an as needed basis.

Mercury emissions from the boiler are controlled by injecting sorbent, i.e. activated carbon, into the ductwork prior to the ESP on the boiler. In addition, calcium bromide may be applied to the coal fired in the unit to reduce mercury emissions.

Note: The description in Condition 7.1.1 is for informational purposes only and implies no limits or constraints.

7.1.2 List of Emission Units and Air Pollution Control Equipment

These unit-specific conditions address the following emission unit:

Boiler ID	Description	Emission Control Equipment
Boiler 1 NB-1	Coal-fired Boiler	Low NO _x Burners with Overfire Air, ESP with FGC, and ACI

7.1.3 Applicability Provisions

- a. i. An "affected boiler" for the purpose of these unit-specific conditions is the boiler described in Conditions 7.1.1 and 7.1.2.
- ii. The affected boiler is also an "affected facility" for purposes of the New Source Performance Standards (NSPS) for Fossil-Fuel Fired Steam Generators for Which Construction Is Commenced After August 17, 1971, pursuant to 40 CFR 60.40. As an affected facility, the boiler is also subject to applicable requirements of the NSPS, 40 CFR 60 Subpart D and related requirements in the NSPS, 40 CFR 60 Subpart A, General Provisions.

b. Startup Provisions

Subject to the following terms and conditions, the Permittee is authorized to operate the affected boiler in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(c) (35 IAC 212.122), Condition 7.1.4(b) (35 IAC 212.204), Condition 7.1.4(d) (35 IAC 216.121), and Condition 7.1.4(e) (35 IAC 217.121(d)) during startup. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally describing the efforts that will be used "...to minimize startup emissions, duration of individual startups and frequency of startups."

- i. This authorization does not relieve the Permittee from the continuing obligation to demonstrate that all reasonable efforts are made to minimize startup emissions, duration of individual startups and frequency of startups.
- ii. The Permittee shall conduct startup of the affected boiler in accordance with written procedures prepared by the Permittee and maintained in the control room for the boiler, that are specifically developed to minimize emissions from startups and that, at a minimum, include the following measures:
 - A. Use of auxiliary fuel burners to heat the boiler prior to initiating burning of coal.
 - B. Timely energization of the electrostatic precipitator as soon as this may be safely accomplished without damage or risk to personnel or equipment.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.1.9(g) and 7.1.10-2(a).
- iv. As provided by 35 IAC 201.265, an authorization in a permit for excess emissions during startup does not shield a Permittee from enforcement for any violation of applicable emission standard(s) that occurs during startup and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

c. Malfunction and Breakdown Provisions

Subject to the following provisions, the Permittee is authorized to continue operation of the affected boiler in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(c) (35 IAC 212.122), Condition

7.1.4(b) (35 IAC 212.204), Condition 7.1.4(d) (35 IAC 216.121), and Condition 7.1.4(e) (35 IAC 217.121(d)) in the event of a malfunction or breakdown of the affected boiler, including the ash removal system or the electrostatic precipitator (including flue gas conditioning). This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

- i. This authorization only allows such continued operation as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable reduce boiler load, repair the affected boiler, remove the affected boiler from service or undertake other action so that excess emissions cease.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.1.9(h), and 7.1.10-3(a). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the boiler out of service.
- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.1.4 Applicable Emission Standards

a. Federal NSPS standards

- i. The affected boiler is subject to New Source Performance Standards (NSPS) for Fossil Fuel Fired Steam Generators, 40 CFR 60, Subparts A and D.
- ii. Pursuant to the NSPS, emissions from the affected boiler shall not exceed the following emission standards:
 - A. For PM, 0.10 lb/mmBtu [40 CFR 60.42(a)(1)].
 - B. For SO₂, 1.2 lb/mmBtu [40 CFR 60.43(a)(2)].
 - C. For NO_x, 0.70 lb/mmBtu [40 CFR 60.44(a)(3)].
- iii. Opacity from the affected boiler shall not exceed 20 percent, as measured on a six minute average, except for one 6 minute period per hour of not more than 27 percent pursuant to NSPS, 40 CFR 60.42(a)(2).
- iv. Pursuant to 40 CFR 60.8(c) and 60.11(c), the above emission limitations do not apply during startup, shutdown, and malfunction, as defined by 40 CFR 60.2. Notwithstanding this provision, pursuant to 40 CFR 60.7(b) and (c), exceedances of these limitations during startup, shutdown and malfunction are still subject to recordkeeping and reporting requirements under the NSPS.

- b. The emissions of PM from the affected boiler shall not exceed 0.1 lb/mmBtu of actual heat input in any one hour period, pursuant to 35 IAC 212.204.

c. Intentionally Blank.

- d. The emissions of CO from the affected boiler shall not exceed 200 ppm, corrected to 50 percent excess air, pursuant to 35 IAC 216.121.

- e. The emissions of NO_x from the affected boiler shall not exceed 0.7 lb/mmBtu of actual heat input in any one hour period, pursuant to 35 IAC 217.121(d).

- f. The EGU at the source is subject to the following requirements related to NO_x emissions pursuant to 35 IAC Part 217 Subpart V:

- i. During each ozone control period (May 1 through September 30):

- A. The emissions of NO_x from the EGU shall not exceed 0.25 lb/mmBtu of actual heat input based on an ozone control period average for the EGU, pursuant to 35 IAC 217.706(a), or
- B. Notwithstanding the requirement in Condition 7.1.4(f)(i)(A), if the Permittee elects to participate in a NO_x averaging plan pursuant to 35 IAC 217.708(a), the average rate of emissions of NO_x from the Permittee's EGU and all other eligible EGUs that are participating in such NO_x averaging demonstration shall not exceed 0.25 lb/mmBtu of actual heat input, as averaged for the ozone control period, pursuant to 35 IAC 217.708(a) and (b). For this purpose, eligible EGUs include: (1) the EGU at this source, which is authorized by this permit to participate in a NO_x averaging demonstration, and (2) any other EGU that is authorized to participate in a NO_x averaging plan by a CAAPP permit or other federally enforceable permit issued by the Illinois EPA to the owner or operator of that EGU.

Note: Given the emission determination methods specified by 35 IAC 217.710, the emissions of NO_x for purposes of these standards are generally calculated in accordance with the federal Acid Rain Program and are different from the emissions determined for purposes of the NO_x Trading Program.

- ii. If the Permittee elects to have the EGU comply by participation in a NO_x averaging demonstration as provided for and authorized above:
 - A. The EGU shall be included in only one NO_x averaging demonstration during an ozone control period, pursuant to 35 IAC 217.708(d).
 - B. The NO_x averaging demonstration shall only include other EGUs that are authorized through a federally enforceable permit to participate in a NO_x averaging demonstration and for which the owner or operator of the EGU maintains the required records, data and reports and submits copies of such records, data, and reports to the Illinois EPA upon request, pursuant to 35 IAC 217.708(c) and (g).
 - C. The effect of failure of the NO_x averaging demonstration to show compliance shall be that the compliance status of the EGU shall be determined pursuant to Condition 7.1.4(f)(i)(A) as if the NO_x emission rate of the EGU was not averaged with other EGUs, pursuant to 35 IAC 217.708(f).

Note: The above requirements also apply as a matter of rule to EGUs other than this EGU if the owner or operator of such other EGUs elects to participate in a NO_x averaging demonstration.

- g. The applicable requirements for the opacity of the emission of smoke or other particulate matter from the affected boiler are set forth in Condition 5.2.2(c).
- h. The Acid Rain Program applicable requirements for the affected boiler are set forth in Condition 6.2.
- i. The Cross-State Air Pollution Rule applicable requirements for the affected boiler are set forth in Condition 6.3.
- j. The 35 IAC 225 Subpart B applicable requirements for the affected boiler are set forth in Condition 6.4.
- k. The Mercury and Air Toxics Standards rule applicable requirements for the affected boiler are set forth in Condition 6.5.
- l. Pursuant to 35 IAC 214.121(b)(2)(A), on and after January 1, 2017, if the affected boiler is burning liquid fuel exclusively,
 - i. The sulfur content of all residual fuel oil used by the affected boiler must not exceed 1000 ppm. (State-Only Requirement)
 - ii. The sulfur content of all distillate fuel oil used by the affected boiler must not exceed 15 ppm. (State-Only Requirement)

7.1.5 Non-Applicability of Regulations of Concern

- a. i. This permit is issued based on the affected boiler not being subject to the NSPS standards for firing of oil, i.e., 40 CFR 60.43(a)(1) for SO₂ and 40 CFR 60.44(a)(2) for NO_x, when it is using coal or other solid fuel as its principal fuel and distillate fuel oil is only used in incidental amounts for specific purposes, such as startup, opacity reduction emission mitigation, flame stabilization, or other temporary interruption in solid fuel supply, as associated with routine firing of solid fuel.
- ii. If the affected boiler is not using coal or other solid fuel as its principal fuel, the boiler shall comply with the requirements of the following NSPS standards that address burning a combination of fuels:
 - A. For SO₂, 40 CFR 60.43(b). For this purpose, the applicable SO₂ standard for heat input from liquid

fuel shall be 0.8 lb/mmBtu, pursuant to 40 CFR 60.43(a)(1) and (b).

- B. For NO_x, 40 CFR 60.44(b). For this purpose, the applicable NO_x standards for heat input from natural gas and liquid fuel shall be 0.2 and 0.3 lb/mmBtu, respectively, pursuant to 40 CFR 60.44(a)(1) and (2), respectively.

b. Pursuant to Section 39.5(7)(a) of the Act,

- i. The Permittee is shielded from the following rules for the affected boiler when the boiler is using coal (solid fuel) as its principal fuel. This is because incidental use of natural gas or liquid fuel generally serves as a good combustion practice for firing of solid fuel and does not provide a decrease in emissions that can be used to reduce the emission rate that must be achieved for the emissions associated with combustion of solid fuel.

A. 35 IAC 212.207

B. 35 IAC 214.162

C. 35 IAC 217.121(e)

- ii. If the affected boiler is not using coal (solid fuel) as its principal fuel, the affected boiler shall comply with the requirements of the following conditions. During such periods, for PM emissions, Condition 7.1.5(b)(ii)(A) shall substitute for Condition 7.1.4(b). For SO₂ emissions, Condition 7.1.5(b)(ii)(B), below, shall determine the applicable SO₂ standard. For NO_x emissions, Condition 7.1.5(b)(ii)(C) shall substitute for Condition 7.1.4(e).

- A. The emissions of PM from the affected boiler in any one hour period shall not exceed the amount, in lb/hr, allowed by the formula in 35 IAC 212.207. For this purpose, the applicable PM standard for heat input from liquid fuel shall be 0.10 lb/mmBtu, pursuant to 35 IAC 212.206 and 212.207.

- B. The emissions of SO₂ from the affected boiler in any one-hour period shall not exceed the amount, in lb/hr, allowed by the formula in 35 IAC 214.162. For this purpose, the applicable SO₂ standards for heat input shall be:

- I. Residual fuel oil: 1.0 lb/mmBtu. [35 IAC 214.161(a)(1)]

- II. Distillate fuel oil: 0.3 lb/mmBtu. [35 IAC 214.161(a)(2)]
- III. On and after January 1, 2017, in addition to the standards in Condition 7.1.5(b)(ii)(B)(I) and (II) above:
 - a. Residual fuel oil: 0.105 lb/mmBtu. (State-Only Requirement) [35 IAC 214.162(d) and Section 39.5(7)(a) of the Act]
 - b. Distillate fuel oil: 0.0015 lb/mmBtu. (State-Only Requirement) [35 IAC 214.162(d)]
- C. The emissions of NO_x from the affected boiler shall not exceed the amount, in lb/hr, allowed by the formula in 35 IAC 217.121(e).
- iii. For the purpose of the above conditions, the affected boiler shall be considered to be using coal (solid fuel) as its principal fuel if the use of natural gas and/or fuel oil is incidental to the use of solid fuel, occurring for specific purposes associated with routine firing of solid fuel, such as startup, opacity reduction emission mitigation, flame stabilization, or other temporary interruption in solid fuel supply. The boiler shall not be considered to be using solid fuel as its principal fuel if the use of natural gas and/or fuel oil is more than incidental to the firing of solid fuel in the boiler or the use of solid fuel is incidental to the operation of the boiler.
- iv. The Permittee shall notify the Illinois EPA if the status of the affected boiler changes to or from using coal (solid fuel) as its principal fuel. This notification shall be provided at least 7 days in advance of such change in status unless the change results from a sudden event that precludes such advance notification, in which case notification shall be provided as soon as practicable prior to the change.
- c. Pursuant to 35 IAC 201.403(a), the Permittee is not subject to the requirements of 35 IAC Part 201 Subpart L for opacity monitoring because the Permittee conducts opacity monitoring of the affected boiler in accordance with the provisions of the NSPS, as specified at 40 CFR 75.14 of the federal Acid Rain Program.
- d. The affected boiler is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for SO₂ and NO_x Acid Rain Requirements, because the affected boiler is subject to Acid Rain Program requirements, pursuant to 40 CFR 64.2(b)(1)(iii).

- e. The affected boiler is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for NO_x (Conditions 6.4.4(b) and 7.1.4(e) and (f)), and mercury (Condition 6.4.4(a)) State Rule Requirements, pursuant to 40 CFR 64.2(b)(1)(vi), because the affected boiler is subject to an emission limitation or standard for which this CAAPP permit specifies a continuous compliance determination method.
- f. The affected boiler is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for CO (Condition 7.1.4(d)) and SO₂ (Condition 6.4.4(c)) State Rule Requirements because the affected boiler does not use an add-on control device to achieve compliance with an emission limitation or standard.
- g. The affected boiler is not subject to 40 CFR Part 60 Subpart Da, Standards of Performance for Electric Utility Steam Generating Units, because the affected boiler did not commence construction, modification or reconstruction after September 18, 1978.
- h. This permit is issued based on the affected boiler not being subject to 40 CFR Part 60 Subpart CCCC, Standards of Performance for Commercial and Industrial Solid Waste Incineration Units, because the affected boiler does not combust any solid waste as that term is defined in 40 CFR Part 241.
- i. The affected boiler is not subject to 40 CFR Part 63 Subpart DDDDD or JJJJJJ, the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. This is because electric utility steam generating units (EGU) covered by 40 CFR 63 Subpart UUUUU are not subject to 40 CFR 63 Subpart DDDDD or JJJJJJ.
- j. The affected boiler is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for the emission standards set forth in Section 6.4 for mercury, filterable PM, total non-Hg HAP metals, individual non-Hg HAP metals, or Acid Gases, pursuant to 40 CFR 64.2(b)(1)(i), because the affected boiler is subject to emission limitations or standards proposed by the Administrator after November 15, 1990, i.e. 40 CFR 63 Subpart UUUUU.
- k. Pursuant to 35 IAC 217.342(b), the affected boiler is not subject to 35 IAC 217 Subpart M, Electrical Generating Units, because the Permittee is complying with 35 IAC 225 Subpart B through the multi-pollutant standard. (See Condition 6.4.3)

7.1.6 Work Practices

Newton Power Station
I.D. No.: 079808AAA
Permit No.: 95090066

- a. i. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall maintain and operate the affected boiler, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions, as required pursuant to the NSPS, 40 CFR 60.11(d).
- ii. As part of its operation and maintenance of the affected boiler, the Permittee shall perform a combustion evaluation on the boiler at least semi-annually, pursuant to Section 39.5(7)(d) of the Act. This evaluation shall consist of process measurements of the concentration of CO in the flue gas of the affected boiler, as well as any adjustments and/or corrective measures undertaken for the combustion systems of the boiler.
- iii. In a semi-annual period in which the Permittee conducts a tune-up of the EGU burner and combustion controls as specified in Condition 6.5.3(e), such tune-up shall satisfy the semi-annual combustion evaluation requirement in Condition 7.1.6(a)(ii) for that period.

7.1.7 Testing Requirements

Pursuant to Section 39.5(7)(d)(ii) of the Act, the Permittee shall have the PM and CO emissions of the affected boiler measured as specified below:

- a. i. Periodic PM emission measurements shall be made for the affected boiler within a time period determined from the compliance margin for the applicable PM emission standard, based on the results of the preceding PM measurement, as follows. For this purpose, the compliance margin is the extent to which the actual PM emissions as measured are lower than the applicable PM limit. For example, if the measured PM emissions of the affected boiler is 0.075 lb/mmBtu, the compliance margin for the applicable PM limit, 0.1 lb/mmBtu, would be 25 percent. $(0.100 - 0.075 = 0.025, 0.025 / 0.100 = 0.25$ or 25 percent)
 - A. If the compliance margin is less than 20 percent, within 15 months of the previous measurement.
 - B. If the compliance margin is between 20 and 40 percent, within 27 months of the previous measurement.
 - C. If the compliance margin is greater than 40 percent, within 39 months of the previous measurement.
- ii. Measurements of CO emissions shall be made as follows:

- A. In conjunction with each measurement of PM emissions made pursuant to Condition 7.1.7(a)(i) (or a RATA for SO₂ or NO_x preceding such measurement), provided, however, that if measured CO emissions are no more than 100 ppm at 50 percent excess air, CO measurements need not be performed with the next PM measurement (or preceding RATA) but shall be performed with the second measurement of PM emissions following the measurement in which CO emissions were no more than 100 ppm (or a RATA preceding that PM measurement).
- iii. A. If alternative fuel (i.e., any fuel other than coal, fuel oil, or gas) is greater than 3.0 percent by weight of the fuel burned in the boiler during a calendar quarter, unless measurements for PM and CO emissions have already been conducted while burning alternative fuel at a percentage that is greater than or equal to the percent of those materials burned in that calendar quarter or at the maximum rate at which the systems that feed alternative fuel to the boiler will be operated, the Permittee shall have measurements of PM and CO emissions from the boiler made during the next calendar quarter in which alternative fuel is burned in the boiler.
- B. The Permittee shall conduct such measurements while firing the boiler at the lower of the following: (i) at least 1.25 times the percentage of alternative fuel material in the calendar quarter that triggered the testing; or (ii) at the maximum rate at which the systems that feed alternative fuel to the boiler will be operated. If the boiler has been burning a mix of alternative fuel materials, the mix of fuel during such measurements shall be approved by the Illinois EPA.
- C. The Permittee shall repeat such measurements if the percentage of alternative fuel burned in a boiler during a quarter is more than the percentage of such material being burned in the boiler when previous emission measurements were conducted.
- iv. Measurements of PM and CO emissions shall be made within 90 days (or such later date set by the Illinois EPA) following a request by the Illinois EPA for such measurements.
- b. i. The Permittee shall operate the affected boiler at maximum normal operating load conditions during each

performance test. Maximum normal operating load will be generally between 90 and 110 percent of design capacity but should be representative of unit specific normal operations during each test run, pursuant to 39.5(7)(c) and consistent with 40 CFR 63.10007(a)(2). In addition, the Permittee may perform measurements at other operating conditions to evaluate variation in emissions.

- ii. Measurements shall be taken at an appropriate location in the ductwork or stack associated with the affected boiler.
- iii. The following Reference Methods and procedures shall be used for these measurements. Refer to 40 CFR 60, Appendix A for Reference Methods.

Location of Sample Points	Reference Method 1
Gas Flow and Velocity	Reference Method 2
Flue Gas Weight	Reference Method 3
Moisture	Reference Method 4
Particulate Matter (PM)	Reference Method 5
Carbon Monoxide (CO)	Reference Method 10

Other test methods adopted by USEPA may be used in place of the above methods with the approval of the Illinois EPA.

- c. Except for minor deviations in test methods, as defined by 35 IAC 283.130, emission testing shall be conducted in accordance with a test plan prepared by the testing service or the Permittee and submitted to the Illinois EPA for review prior to emission testing, and the conditions, if any, imposed by the Illinois EPA as part of its review and approval of the test plan, pursuant to 35 IAC 283.220 and 283.230.
 - i. The Permittee shall submit this test plan within the time period provided in Condition 8.6.2 and the test plan shall include the information specified by Condition 8.6.2.
 - ii. Notwithstanding the above, as provided by 35 IAC 283.220(d), the Permittee need not submit a test plan for emission testing that will be conducted in accordance with the procedures used for previous tests accepted by the Illinois EPA or the previous test plan submitted to and approved by the Illinois EPA, provided that the Permittee's notification for testing, as required below, contains the information specified by 35 IAC 283.220(d)(1)(A), (B) and (C).
- d. The Permittee shall notify the Illinois EPA prior to conducting emission tests to enable the Illinois EPA to observe testing. Notification for the expected test date shall be submitted a minimum of 30 days prior to the expected

date of testing. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual test date. The Illinois EPA may on a case-by-case basis accept shorter advance notice if it would not interfere with the Illinois EPA's ability to observe testing.

- e. The Permittee shall submit the Final Report(s) for any required emission testing to the Illinois EPA within 45 days after the test results are compiled and finalized but no later than 120 days after the date of testing. The Final Report shall include the information specified in Condition 8.6.3 and the following information:
 - i. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.
 - ii. A description of any minor deviations from the test plan, as provided by 35 IAC 283.230(a).
 - iii. Detailed description of operating conditions during testing, including:
 - A. Source(s) of fuel and specifications (ash, sulfur and heat content).
 - B. Boiler operating information, i.e., firing rate of the affected boiler(s) (mmBtu/hr), composition of fuel as burned (ash, sulfur and heat content), and fuel blending ratio (%), if a blend of fuels is burned.
 - C. Combustion system information, i.e., level of excess air in the flue gas, and levels of CO, CO₂ or O₂ in the flue gas.
 - D. Control equipment operating parameters during testing including any use of the flue gas conditioning system.
 - E. Load during testing (gross megawatt output and steam flow).
 - F. Information on the usage of alternative fuel during testing, if testing was conducted to satisfy Condition 7.1.7(a)(iii).
 - iv. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
 - v. The SO₂, NO_x, O₂ or CO₂, (hourly averages) and opacity data (6-minute averages) measured during testing.

7.1.8 Monitoring Requirements

- a. Pursuant to 40 CFR 60.45, 40 CFR 75.14, and Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, operate, calibrate and maintain continuous monitoring equipment for the measurement of opacity from the affected boiler.
 - i. The Permittee shall operate this equipment in accordance with the general provisions for opacity monitoring systems in 40 CFR 75.10.
 - ii. The monitor shall be the primary basis for reporting of exceedances of Condition 7.1.4(a)(iii), in accordance with 40 CFR 60.7(c) and 60.45(g), and Condition 5.2.2(c). (See Conditions 7.1.10-2(a) and 7.1.10-3(a).)
- b. Pursuant to 40 CFR 60.45, 40 CFR 75.11, and Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, operate, calibrate and maintain a continuous emission monitoring system (CEMS) for the measurement of SO₂ emissions from the affected boiler.
 - i. The CEMS shall be used to demonstrate compliance with the limits in Condition 7.1.4(a)(ii)(B) based on the average hourly SO₂ emission rate determined from monitored data from three-hour block averaging periods.

Note: This permit is issued based on the Permittee performing continuous emission monitoring for SO₂ rather than fuel sampling and analysis for sulfur content as allowed by 40 CFR 60.45(b)(2). In addition, the permit allows the use of an "Acid Rain Monitoring System", operated to comply with 40 CFR Part 75, in lieu of an "NSPS Monitoring System", as authorized by USEPA guidance from the Stationary Source Compliance Division of the Office of Air Quality Planning and Standards, as such monitoring is equivalent or more stringent.

- c. Pursuant to 40 CFR 60.45, 40 CFR 75.12, 35 IAC 217.710(a), and Section 39.5(7)(d)(iii) of the Act, the Permittee, shall install, calibrate, maintain and operate a CEMS for the measurement of NO_x emissions from the affected boiler, in accordance with the requirements of 40 CFR 75 Subpart B.
- d. Pursuant to Section 412 of the Clean Air Act and 40 CFR Part 75, the source is required to operate continuous monitors for the affected boiler for various parameters, including SO₂, NO_x, volumetric flow and opacity, along with a computerized data acquisition and handling system for collected data. (See also Condition 6.2.3) To the extent that applicable performance specifications and operating requirements for monitoring under 40 CFR Part 75 are inconsistent with the above requirements for monitoring, the procedures of 40 CFR Part 75 shall take precedence. (See also Condition 8.2.)

e. Compliance Assurance Monitoring (CAM) Requirements

The affected boiler is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM for the standard set forth in Condition 7.1.4(b) as addressed in Condition 7.1.13-2.

f. Pursuant to Construction Permit 08010049:

- i. The Permittee shall operate and maintain instrumentation for the sorbent injection system for sorbent feed rate or the operational status of the system, e.g., injecting sorbent at a normal rate, injecting sorbent at a less than normal rate, or off. [T1]
- ii. The Permittee shall operate instrumentation or continuous monitors for the calcium bromide application system which addresses the rate at which calcium bromide is applied to the coal. [T1]

7.1.9 Recordkeeping Requirements

a. Operational Records for the Affected Boiler

Pursuant to Sections 39.5(7)(a) and (e) of the Act, the Permittee shall maintain the following operational records for the affected boiler:

- i. Records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative [40 CFR 60.7(b)].
- ii. A. Load (in terms of either gross megawatts output or steam flow) on an hourly basis for the affected boiler.

B. If the Permittee is relying on data for heat input for purposes of compliance with Conditions 7.1.4(a)(ii) or 7.1.4(b) that is different from that recorded pursuant to the federal Acid Rain Program, records of heat input (mmBtu, on an hourly basis) or the conversion factors that the Permittee relies upon to convert from boiler load as recorded above to hourly heat input.
- iii. Records for each day when an alternative fuel (i.e., a fuel other than coal, gas or oil) was burned, including the estimated amount of each such material burned .
- iv. Total operating hours (hours/quarter) for the affected boiler.

- v. A. Amount of coal consumed (tons/quarter).
- B. Amount of each alternative fuel consumed (tons, gallons, cubic feet per quarter, as appropriate).
- vi. A. Records of agreements with suppliers of alternative fuel(s), including origin of material, specifications for heat and ash content, and representative data for elemental composition of such material, including mercury and other heavy metals, chlorine and fluorine.
- B. Records for each load of such fuel(s) received at the source, which shall include date, supplier name, type of fuel and amount (tons).
- vii. Operating records, maintenance and repair records, or other records for the affected boiler documenting the performance of the combustion evaluation required by Condition 7.1.6(a)(ii), including the date of the evaluation, the concentrations of CO measured at the start and conclusion of the evaluation, and a description of any adjustments and/or corrective measures undertaken for the combustion systems of the boiler.

b. Records for Control Equipment

Pursuant to Sections 39.5(7)(a) and (e) of the Act, the Permittee shall maintain the following records for the air pollution control equipment on the affected boiler:

i. Maintenance and Repair Record

A maintenance and repair record for each control device, which shall list the activities performed, with date and description. (See also Condition 9.6.1, Control Equipment Maintenance Records.)

ii. Electrostatic Precipitators (ESPs)

When the affected boiler served by the ESP is in operation:

- A. The status of each field in the ESP shall be recorded at least once per shift.
- B. The following numerical data shall be recorded at least once per day: (1) Primary voltages and currents; (2) Secondary voltages and currents; and (3) Sparking rates.

iii. Flue Gas Conditioning (FGC) System

- A. Manufacture/vendor or Permittee developed operating and maintenance procedures.
- B. Operating records, including identification of conditioning agent and system settings.

Note: These records only need to be maintained during periods when the Permittee operates the system, which is operated at its discretion as needed to comply with applicable requirements.

c. Records for Continuous Opacity Monitoring Systems

Pursuant to Section 39.5(7)(e) of the Act, and the NSPS, 40 CFR 60.45, the Permittee shall maintain records for the opacity monitoring system on the affected boiler required by Condition 7.1.8(a) that shall include the following:

- i. Operating records for the opacity monitoring system, including:
 - A. Opacity measurements (6-minute averages).
 - B. Performance testing measurements and evaluations, calibration checks, and other quality assurance/control activities.
 - C. Maintenance and adjustment performed.
 - D. Periods other than performance of quality assurance, calibration, and maintenance, as addressed above, when the monitor was inoperative, with reason.
 - E. Quarterly reports submitted in accordance with NSPS, 40 CFR 60.7(c), and Condition 7.1.10-2(a) and (d).
- ii. Records to address compliance with Conditions 5.2.2(c) and 7.1.4(a)(iii), including:
 - A. Each period when the opacity exceeded 20 percent on a 6-minute block average, with date, time, whether it occurred during startup, shutdown, malfunction or breakdown, and further explanation of the incident.

d. Records for Continuous SO₂ Monitoring System

Pursuant to Section 39.5(7)(e) of the Act and the NSPS, 40 CFR 60.45, the Permittee shall maintain records for the SO₂ CEMS on the affected boiler required by Condition 7.1.8(b) that shall include the following:

- i. Operating records for the SO₂ CEMS, including:

- A. SO₂ emission data in the units of the applicable standards (lb/mmBtu) calculated in accordance with NSPS, 40 CFR 60.45(e).
- B. Performance testing measurements and evaluations, calibration checks, and other quality assurance/control activities.
- C. Maintenance and adjustments performed.
- D. Periods when the SO₂ CEMS was inoperative, with date, time and reason.
- E. Data reduction information.
- F. Quarterly reports submitted in accordance with NSPS, 40 CFR 60.7(c), and Condition 7.1.10-2(b).
- ii. Records to verify compliance with the limitation of Condition 7.1.4(a)(ii)(B), including:
 - A. SO₂ emissions in the terms of the applicable standard (lb/mmBtu) from the affected boiler on an hourly basis, as derived from the data obtained by the SO₂ CEMS.
 - B. The date and time of any three-hour block averaging period when the total SO₂ emission rate, as recorded above, exceeded 1.2 lb/mmBtu for the boiler and the emission rate, as recorded above, with the calculated SO₂ emission rate. These records shall be prepared from the above records at least quarterly as needed to verify compliance with the limitation of Condition 7.1.4(a)(ii)(B).
- iii. The Permittee shall record for each hour the information required by 40 CFR 75.57(c) for the affected boiler.
- e. Records for Continuous NO_x Monitoring

Pursuant to 35 IAC 217.712(a), Section 39.5(7)(e) of the Act and the NSPS, 40 CFR 60.45, the Permittee shall maintain records for the NO_x CEMS on the affected boiler required by Condition 7.1.8(c) in accordance with the applicable recordkeeping requirements of 40 CFR 75, that shall include the following:

 - i. Operating records for the NO_x CEMS, including:
 - A. NO_x emission data in the units of the applicable standards (lb/mmBtu) calculated in accordance with NSPS, 40 CFR 60.45(e).

- B. Performance testing measurements and evaluations, calibration checks, and other quality assurance/control activities.
- C. Maintenance and adjustments performed.
- D. Periods when the NO_x CEMS was inoperative, with date, time and reason.
- E. Data reduction information.
- F. Quarterly reports submitted in accordance with Condition 7.1.10-2(c).
- ii. Records to verify compliance with the limitation of Conditions 7.1.4(a)(ii)(C), 7.1.4(e), and 7.1.4(f) including:
 - A. NO_x emissions in the terms of the applicable standard (lb/mmBtu) from the affected boiler on an hourly basis, as derived from the data obtained by the NO_x CEMS.
 - B. The date and time of any three-hour block averaging period when the total NO_x emission rate, as recorded above, exceeded 0.7 lb/mmBtu as allowed by Conditions 7.1.4(a)(ii)(C) and 7.1.4(e), with the calculated NO_x emission rate. These records shall be prepared from the above records at least quarterly as needed to verify compliance with the limitation of Conditions 7.1.4(a)(ii)(C) and 7.1.4(e).
- iii. The Permittee shall record the applicable information required by 40 CFR 75.57(d) for the affected boiler.
- f. Acid Rain Program

Records for the continuous emission monitoring required for the affected boiler by the Acid Rain Program should be kept by the Permittee in accordance with 40 CFR Part 75, including the General Recordkeeping Provisions; the General Recordkeeping Provisions for Specific Situations, if applicable; and Certification, Quality Assurance and Quality Control Record Provisions [See Condition 6.2.3].
- g. Records for Startups of the Affected Boiler, pursuant to Section 39.5(7)(b) of the Act
 - i. The Permittee shall maintain written startup procedures for the affected boiler, as required by Condition 7.1.3(b)(ii).
 - ii. The Permittee shall maintain the following records related to startups of the affected boiler:

- A. For all startups on the affected boiler.
 - I. Date, time, and duration of the startup.
 - II. A description of the startup, the reason(s) for the startup, and an indication of whether or not written startup procedures were followed. If any procedures were not followed, the records shall include any departures from the established procedures and the reason the procedure could not be followed.
- B. For each startup of the affected boiler where an exceedance of a relevant standard occurred during startup or the Permittee believes that compliance with the PM standard likely was not maintained during the startup, maintain the following additional records for such startup.
 - I. An explanation of the nature of such exceedance(s), including the qualitative or, if available, quantitative magnitude of such excess emissions.
 - II. A description of the actions taken or to be taken to minimize the magnitude and duration of any excess emissions.
 - III. An explanation whether similar incidents could be prevented in the future and if so, a description of the actions taken or to be taken to prevent similar incidents in the future.
- C. For each startup when the duration of startup from initial firing of fuel to stable operation of the generating unit at load exceeded 20 hours maintain the following additional records for such startups.
 - I. A description of the events that led up to the extended startup duration and reason(s) for the extended startup duration.
 - II. The actions taken to minimize emissions and the duration of the startup.
 - III. An explanation whether similar incidents might be prevented in the future and if so, the corrective actions taken or to be taken to prevent similar incidents.

h. Records for Continued Operation During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (e) of the Act, the Permittee shall maintain the following records related to malfunction and breakdown of the affected boiler:

- i. Maintenance and repair records for the affected boiler that, at a minimum, address aspects or components of the boiler for which malfunction or breakdown has resulted in excess emissions, which shall list the activities performed on such aspects or components, with date, description and reason for the activity. In addition, in the maintenance and repair records for control equipment required by Condition 7.1.9(b)(i), the Permittee shall also list the reason for the activities that are performed.
- ii. Records for each incident when operation of the affected boiler continued with excess opacity or emissions, during malfunction or breakdown as addressed by Condition 7.1.3(c), that shall include the following information:
 - A. Date, time, duration (i.e., the length of time during which operation continued with excess opacity or emissions until corrective actions were taken or the boiler was taken out of service), and description of the incident.
 - B. The corrective actions used to reduce the quantity of emissions and to reduce the duration of the incident.
 - C. Confirmation of fulfillment of the requirements of Condition 7.1.10-3(a), as applicable, including copies of any follow-up reports submitted pursuant to Condition 7.1.10-3(a)(ii).
 - D. If opacity during the incident exceeded the applicable standard, as listed in Condition 5.2.2(c), for two or more hours, emissions exceeded an applicable hourly standard, as listed in Condition 7.1.4(b), (d) or (e), or the Permittee believes that compliance with the PM standard, as listed in Condition 7.1.4(b), likely was not maintained:
 - I. A detailed explanation of:
 - (1) Why continued operation of the affected boiler was necessary, and
 - (2) The probable cause of the incident.

- II. The preventative measures that have been or will be taken to prevent similar incidents or reduce their frequency and severity, including any repairs to the affected boiler and associated equipment and any changes to operating and maintenance procedures.
 - E. If PM emissions during the incident exceeded an applicable hourly standard, as listed in Condition 7.1.4(b), or the Permittee believes that compliance with the PM standard likely was not maintained, estimates of the magnitude of emissions of PM during the incident, with magnitude estimated on a qualitative or, if available, quantitative basis.
 - F. If CO emissions during the incident exceeded an applicable hourly standard, as listed in Condition 7.1.4(d), estimates of the magnitude of emissions of CO during the incident, with magnitude estimated on a qualitative or, if available, quantitative basis.
- i. Records for Continuous Monitoring Systems
 - i. Monitoring Plans
 - A. Pursuant to 40 CFR 75.53(a)(2), the Permittee shall prepare and maintain a monitoring plan for each continuous emissions or opacity monitoring system. The monitoring plan shall contain sufficient information on the continuous emission or opacity monitoring system to demonstrate that all unit SO₂ emissions, NO_x emissions, CO₂ emissions, and opacity are monitored and reported.
 - B. Pursuant to 40 CFR 75.53(b), whenever the Permittee makes a replacement, modification, or change in the certified CEMS or continuous opacity monitoring system, including a change in the automated data acquisition and handling system or in the flue gas handling system, that affects information reported in the monitoring plan, then the Permittee shall update the monitoring plan.
 - C. Pursuant to 40 CFR 75.53(e), each monitoring plan shall contain the information specified in 40 CFR 75.53(e)(1) in electronic format and the information specified in 40 CFR 75.53(e)(2) in hardcopy format. Electronic storage of all monitoring plan information, including the hardcopy portions, is permissible provided that a paper copy of the information can be furnished upon request for audit purposes.

ii. General recordkeeping provisions

- A. Pursuant to 40 CFR 75.57(a), the Permittee shall maintain for the affected boiler records of all continuous monitoring system measurements, data, reports, and other information required by 40 CFR Part 75 at the source in a form suitable for inspection for at least three (3) years from the date of each record.
- B. Pursuant to 40 CFR 75.57(b), the Permittee shall record for the affected boiler hourly information on unit operating time, heat input rate, and load, as specified at 40 CFR 75.57(b)(1) through (7).

j. Pursuant to Construction Permit 08010049,

- i. The Permittee shall maintain the following records for the sorbent injection system on the affected boiler:
[T1R]
 - A. Operating records or other records for the system that identify the sorbent that is being used and each period of time when the affected boiler was in operation when the system was not being operated.
 - B. Maintenance and repair records or other records for the system that list the activities performed, with date and description.
- ii. The Permittee shall keep records that identify periods when SO₃ is injected upstream of the ESP or "used" on the affected boiler.
- k. Pursuant to 35 IAC 214.121(b)(2)(C)(State-Only Requirement), on and after January 1, 2017, if the affected boiler is burning liquid fuel exclusively,
 - i. The Permittee shall maintain records demonstrating that the fuel oil used by the boiler complies with the requirements in Condition 7.1.4(1), such as records from the fuel supplier indicating the sulfur content of the fuel oil.

7.1.10-1 Reporting Requirements - Reporting of Deviations

a. Prompt Reporting of Deviations

For the affected boiler, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as specified below. These notifications shall include a description of such deviations, including whether they occurred during startup or malfunction/breakdown, and a discussion of the probable cause of such deviations, any

corrective actions taken and any preventative measures taken [Section 39.5(7)(f)(ii) of the Act].

- i. For those breakdown or malfunction PM or opacity events that require notification and reporting pursuant to Condition 7.1.10-3(a), notification and reporting shall be provided pursuant to Condition 7.1.10-3(a) rather than 7.1.10-2(d).
- ii. Notification with the quarterly or annual reports required by Conditions 7.1.10-2(b), (c), (d) and (e) for deviations from Conditions 7.1.4(a), (b), (e), (f) and (g) and from the requirements of Condition 7.1.8 for emissions monitoring, unless notification and reporting for that deviation is required pursuant to Condition 7.1.10-3(a).
- iii. Notification with the quarterly reports required by Condition 7.1.10-2(a) for deviations from the work practice requirements, and recordkeeping requirements.
- iv. Notification no later than 30 days after discovery of deviations from any of the liquid fuel maximum sulfur content requirements in Condition 7.1.4(l). The notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

b. Periodic Reporting of Deviations

The quarterly reports required by Condition 7.1.10-2(a) shall include the following information for the affected boiler related to deviations from permit requirements during the quarter [Sections 39.5(7)(a) and (f)(i) of the Act].

- i. A listing of all notifications and reports for instances of deviations that have been provided in writing to the Illinois EPA pursuant to Condition 7.1.10-3(a). For this purpose, the Permittee need not resubmit copies of these previous notifications or reports but may elect to supplement such material.
- ii. Detailed information, as required by Condition 7.1.10-1(a)(ii) or (iii), for all other deviations not addressed in the above listing.

7.1.10-2 Reporting Requirements - Periodic Reports

a. Quarterly Reports

In place of the semi-annual monitoring reports otherwise required by Condition 8.6.1, the Permittee shall submit quarterly reports to the Illinois EPA pursuant to Sections 39.5(7)(a) and (f) of the Act.

- i. These reports shall include the following information for operation of the affected boiler during the quarter:
 - A. The total operating hours for the affected boiler, as also reported in accordance with 40 CFR Part 75.
 - B. The greatest hourly load achieved by the affected boiler (steam flow or gross megawatts).
 - C. A discussion of significant changes in the fuel supply to the affected boiler, if any, including changes in the source of coal, the introduction of new fuel materials other than coal, gas and oil, and changes in the source of such other fuel materials or the maximum rate at which they will be fired.
 - D. A list of the startups of the affected boiler, including the date, duration and description of each startup, accompanied by a copy of the records maintained pursuant to Condition 7.1.9(g)(ii)(C) for each startup for which such records were required.
- ii. These reports shall include the information specified in Conditions 7.1.10-2(b), (c) and (d) for SO₂, NO_x, and PM emissions and opacity from the affected boiler during the quarter and for the operation of required continuous monitoring systems during the quarter.
- iii. A. These reports shall be submitted after the end of every calendar quarter as follows

<u>Monitoring Period</u>	<u>Submittal Deadline</u>
January - March	May 15
April - June	August 15
July - September	November 15
October - December	February 15

b. Reporting of SO₂ Emissions

Pursuant to Section 39.5(7)(a) and (f) of the Act and the NSPS 40 CFR 60.45(g), the Permittee shall report the following information to the Illinois EPA in accordance with 40 CFR 60.7(c) for the affected boiler with its quarterly reports pursuant to Condition 7.1.10-2(a):

- i. Summary information on the performance of the SO₂ CEMS, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the SO₂ CEMS was not inoperative, repaired or adjusted, such information shall be stated in the report as specified by 40 CFR 60.7(c)(4).
 - ii. If specifically requested by the Illinois EPA or the CEMS downtime was more than 5 percent of the total operating time for the affected boiler: the date and time identifying each period during which the CEMS was inoperative except for zero and span checks, and the nature of CEMS repairs or adjustments and a summary of quality assurance data consistent with 40 CFR Part 75, i.e., the dates and results of the Linearity Test(s) and any Relative Accuracy Test Audit(s) during the quarter, a listing of any days when a required daily calibration was not performed, and the date and duration of any periods when the CEMS was "out-of-control" as addressed by 40 CFR 75.24.
 - iii. The following information for each period when SO₂ emissions were in excess of the applicable standard specified in Condition 7.1.4(a)(ii)(B)**. When there were no such exceedances, this shall be stated in the report.
 - A. The starting date and time of the SO₂ excess emissions.
 - B. The duration of the excess emissions.
 - C. The one-hour and three-hour average (lb/mmBtu) for each three-hour block average of excess emissions.
 - D. A detailed explanation of the cause of the excess emissions if known, including whether such excess emissions occurred during startup, malfunction or breakdown of the boiler.
 - E. A detailed explanation of any corrective actions taken.
- ** For SO₂ emissions, the averaging period is a three-hour block average, as used to determine compliance with the limitation of Condition 7.1.4(a)(ii)(B). The records for excess emissions shall consist of three-hour block emission averages during which the limitation was exceeded.

c. Reporting of NO_x Emissions

Pursuant to Sections 39.5(7)(a) and (f) of the Act and the NSPS 40 CFR 60.45(g), the Permittee shall report the following information for the affected boiler to the Illinois EPA in

accordance with 40 CFR 60.7(c) with its quarterly reports pursuant to Condition 7.1.10-2(a):

- i. Summary information on the performance of the NO_x CEMS, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the NO_x CEMS was not inoperative, repaired or adjusted, such information shall be stated in the report as specified by 40 CFR 60.7(c)(4).
 - ii. If specifically requested by the Illinois EPA or the CEMS downtime was more than 5 percent of the total operating time for the affected boiler: the date and time identifying each period during which the CEMS was inoperative except for zero and span checks, and the nature of CEMS repairs or adjustments and a summary of quality assurance data consistent with 40 CFR Part 75, i.e., the dates and results of the Linearity Test(s) and any Relative Accuracy Test Audit(s) during the quarter, a listing of any days when a required daily calibration was not performed, and the date and duration of any periods when the CEMS was "out-of-control" as addressed by 40 CFR 75.24.
 - iii. The following information for each period when NO_x emissions were in excess of the limitation in Condition 7.1.4(a)(ii)(C) and 7.1.4(e)**. When there were no such exceedances, this shall be stated in the report.
 - A. The starting date and time of the NO_x excess emissions.
 - B. The duration of the excess emissions.
 - C. The one-hour and three-hour average (lb/mmBtu) for each three-hour block average of excess emissions.
 - D. A detailed explanation of the cause of the excess emissions if known, including whether such excess emissions occurred during startup, malfunction or breakdown of the boiler.
 - E. A detailed explanation any corrective actions taken.
- ** For NO_x emissions, the averaging period is a three-hour block average, as used to determine compliance with the limitations of Condition 7.1.4(a)(ii)(C) and 7.1.4(e). The records for excess emissions shall consist of three-hour block emission averages during which the limitation was exceeded.

d. Reporting of Opacity and PM Emissions

Pursuant to Sections 39.5(7)(b) and (f) of the Act and the NSPS, 40 CFR 60.45(g), the Permittee shall report the following information for the affected boiler to the Illinois EPA with its quarterly reports pursuant to Condition 7.1.10-2(a):

- i. Information on the performance of the opacity monitoring system and excess emissions, as required for a "Summary Report" specified by 40 CFR 60.7(d). When no excess opacity occurred or the continuous opacity monitoring system has not been inoperative, repaired or adjusted, such information shall be stated in the report as specified by 40 CFR 60.7(c)(4).
- ii. If the total duration of excess opacity during the calendar quarter is 1 percent or greater of the total operating time for the affected boiler during the quarter or if the opacity monitoring system downtime was more than 5 percent of the total operating time for the affected boiler during the quarter then, in addition to the "Summary Report" required by Condition 7.1.10-2(d)(i) and the information required by Condition 7.1.10-2(d)(iii), the quarterly report must include:
 - A. The total operating time of the affected boiler; and
 - B. The operating status of the opacity monitoring system, including the dates and times of any periods during which it was inoperative except for zero and span checks.
- iii. The following information for each period when opacity was in excess of the applicable standards specified in Conditions 7.1.4(a)(iii) and (g).
 - A. A summary of information for each period of excess opacity that includes:
 - I. The starting date and time of the excess opacity.
 - II. The duration of the excess opacity.
 - III. The magnitude of excess opacity, based on six minute average opacity, including:
 1. The percent opacity for each six-minute period in excess of the limitation.
 2. The start and stop time of each six-minute period in excess of the limitation.

- IV. The cause of excess opacity, if known, including whether such excess opacity occurred during startup, malfunction or breakdown of the boiler.
- V. Any corrective actions taken.
- VI. Identification of any previous report for the incidents during the quarter submitted to the Illinois EPA pursuant to Condition 7.1.10-3(a)(ii). For this purpose, the Permittee need not resubmit copies of such report but may elect to supplement such material.
- VII. Information required by Conditions 7.1.9(h)(ii)(A), (B), and (D)(I) for incidents when operation of the affected boiler continued during malfunction or breakdown with excess opacity that are not addressed by individual reports submitted pursuant to Condition 7.1.10-3(a)(ii).

Note 1: While the NSPS provides that one six-minute period per hour during which the average opacity of emissions exceeds 20 percent opacity, but not more than 27 percent opacity need not be reported (40 CFR 60.45(g)(1)), such a provision does not accompany 35 IAC 212.122.

Note 2: Because the Permittee is reporting in accordance with the requirements of the NSPS, 40 CFR 60.7(c) and (d) for the affected boiler for opacity, pursuant to the federal Acid Rain Program, as included above, the Permittee is not subject to reporting pursuant to 35 IAC 201.405 [35 IAC 201.403(a)].

- iv. The following information for periods when PM emissions were in excess of the limitation in Conditions 7.1.4(a)(ii)(A) and 7.1.4(b). If there were no such periods of excess emissions during the reporting period, the quarterly report shall so state.
 - A. A summary of information for each period of excess emissions that includes:
 - I. The starting date and time of the excess emissions.
 - II. The duration of the excess emissions.
 - III. The qualitative or, if available, quantitative magnitude of the excess emissions.

- IV. The means by which the excess emissions were indicated or identified, if other than the level of opacity.
 - V. A detailed explanation of the cause of the excess emissions if known, including whether such excess emissions occurred during startup, malfunction or breakdown.
 - VI. A detailed explanation of any corrective actions taken.
 - VII. Identification of the previous reports for the incidents submitted to the Illinois EPA pursuant to Condition 7.1.10-3(a)(ii), if any. For this purpose, the Permittee need not resubmit copies of such report but may elect to supplement such material.
- v. The following further information related to opacity exceedances or groups of opacity exceedances during the quarter that resulted from the same or similar cause(s):
- A. For opacity exceedances or groups of exceedances with "recurring" cause(s) (i.e., cause(s) that also resulted in exceedances(s) during the previous quarter): an explanation of any particular circumstances or factors during the current quarter that affected the number or magnitude of such exceedances; a discussion of any changes in the corrective actions taken in response to such exceedances during the current quarter as compared to the previous quarter; and a discussion of any additional preventative measures that were taken during the current quarter to reduce the number or magnitude of exceedance(s).
 - B. For opacity exceedances or groups of exceedances with "new" cause(s) (i.e., cause(s) that did not result in opacity exceedance(s) during the previous quarter): an explanation of the cause(s) or probable cause(s) of such exceedance(s), to the extent known; a discussion of any particular circumstances or factors during the quarter that resulted in such exceedance(s); the corrective action(s) taken, if any, with explanation of how those action(s) functioned to end the exceedance(s); and a discussion of any preventive measures taken to reduce the number or magnitude of exceedance(s).

- vi. A glossary of specialized technical terms commonly used by the Permittee in its reports pursuant to this Condition 7.1.10-2(d).

e. Reporting of NO_x Emissions for the Ozone Control Period

The Permittee shall submit a report to the Illinois EPA by November 30 of each year that demonstrates whether the affected boiler has complied with Condition 7.1.4(f), pursuant to 35 IAC 217.712(d) and (e).

- i. If the Permittee is demonstrating compliance on a unit-specific basis with Condition 7.1.4(f)(i)(A), this report shall contain the information specified by 35 IAC 217.712(d) including the heat input and NO_x emissions of the unit for the ozone control period.

- ii. If the Permittee is demonstrating compliance by means of "NO_x averaging" as authorized by Condition 7.1.4(f)(ii)(B), this report shall contain the information specified by 35 IAC 217.712(e) and other related information as follows:

- A. In all cases, for the affected boiler covered by this permit that is participating in a NO_x averaging demonstration, the Permittee shall report the following:

- I. Identification of the other EGUs that are participating in the demonstration, including identification of the source that is the lead party for the demonstration and that is also taking responsibility for submitting the information required by Condition 7.1.10-2(e)(ii)(B) below.
- II. A statement confirming that the unit is eligible to participate in an averaging demonstration, i.e., the unit is included in only one demonstration [35 IAC 217.708(d)] and the Permittee is complying with applicable recordkeeping and reporting requirements for the unit, pursuant to 35 IAC 217.708(c) and (g).
- III. The average NO_x emission rate for the unit, with calculations and supporting information, as required by 35 IAC 217.712(e)(2) and (3), including the heat input and NO_x emissions of the unit for the ozone control period.
- IV. A statement whether the unit would show compliance on its own in the absence of averaging.

B. If the Permittee is the lead party for a NO_x averaging demonstration that includes units operated by other companies, the Permittee shall report the following:

I. Copies of the information provided by other parties to the lead party for the EGU participating in the demonstration, which include all material required by Condition 7.1.10-2(e)(ii)(A) above (unless or except as this information is provided with the submittal by a person who is a responsible official for the EGU participating in the demonstration).

II. The averaged NO_x emission rate for all EGUs participating in the demonstration, with complete supporting calculations, as required by 35 IAC 217.712(e)(1).

III. A statement whether the demonstration shows compliance.

f. Submittal of Supplemental Information Related to NO_x Emissions during the Ozone Control Period

The Permittee shall submit copies of any records and data required by 35 IAC 217.712 to the Illinois EPA within 30 days after receipt of a written request by the Illinois EPA [35 IAC 217.712(g)].

g. Acid Rain Program Reporting

Pursuant to Section 412 of the Clean Air Act and 40 CFR Parts 72 and 75, the source is subject to the reporting requirements of 40 CFR Part 75, which includes General Provisions; Notifications; Initial Certification or Recertification Application; Quarterly Reports; and Opacity Reports. [See Condition 6.2.3] Pursuant to Section 39.5(17)(m) of the Act, the designated representative of the source must concurrently submit to the Illinois EPA in the same electronic format specified by the USEPA, the data and information submitted to USEPA on a quarterly basis pursuant to 40 CFR 75.64.

7.1.10-3 Reporting Requirements - Notifications

a. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA, Compliance Section and Regional Office, for incidents when operation of the affected boiler continued with excess emissions or excess

opacity during malfunction or breakdown as addressed by Condition 7.1.3(c). These requirements do not apply to such excess emissions, if any, that occur during startup or shutdown of the affected boiler.

- i. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile, or electronic mail for each incident in which the opacity from the affected boiler exceeds 20 percent for eight or more 6-minute averaging periods within a two-hour period unless the Permittee has begun the shutdown of the affected boiler by such time. (Otherwise, if opacity during an incident only exceeds 20 percent for no more than seven 6-minute averaging periods within a two-hour period, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.1.10-2(d).)
- ii. Upon conclusion of each incident in which the applicable PM emission standard was exceeded or in which an exceedance of the opacity standard was two hours or more in duration, the Permittee shall submit a follow-up report to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a copy of the records for the incident required by Condition 7.1.9(h)(ii)(A), (B) and (D).

7.1.11 Anticipated Operating Scenarios/Operating Flexibility

The Permittee is authorized to make the following operational changes with respect to the affected boiler without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements; to properly obtain a construction permit in a timely manner for any activity constituting construction or modification as defined in 35 IAC 201.102 or, as applicable, 40 CFR 52.21(a)(2) or 35 IAC 203.207; and to comply with other legal requirements that apply to such a change:

- a. Operation of additional air pollution control equipment, which is addressed by a separate construction permit.
- b. Burning of coal or a mix of coal from different suppliers.
- c. Burning of the following materials in conjunction with burning of standard fuels, provided that such materials can be accommodated with the existing fuel handling system and the burners in the affected boiler, and such materials do not make up more than 10 percent by weight of the fuel supply to the boiler on a quarterly basis:
 - i. Used oil generated at the source.

Note: Other requirements unrelated to air pollution control may apply to burning of alternative fuels, such as Standards for Management of Used Oil, 35 IAC Part 739.

7.1.12 Compliance Procedures

- a. Compliance with the opacity limitation of Conditions 7.1.4(a)(iii) and 5.2.2(c) (20 percent opacity) is addressed by the average opacity calculated from six-minute periods of opacity measurements from the continuous opacity monitoring system operated in accordance with the requirements of Condition 7.1.8(a) and the relevant recordkeeping requirements of Condition 7.1.9.
- b. Compliance with the PM emission limitation of Conditions 7.1.4(a)(ii)(A) and 7.1.4(b) is addressed by testing requirements in Condition 7.1.7, continuous opacity monitoring in accordance with Condition 7.1.8(e), and the relevant recordkeeping required by Condition 7.1.9.
- c. Compliance with the SO₂ emission limitation of Condition 7.1.4(a)(ii)(B) is addressed by continuous emission monitoring in accordance with Condition 7.1.8(b) and the relevant recordkeeping required by Condition 7.1.9(d).
- d. Compliance with the CO emission limitation of Condition 7.1.4(d) is addressed by the required work practices in Condition 7.1.6(a), emission testing in accordance with Condition 7.1.7, and the relevant recordkeeping required by Condition 7.1.9.
- e. Compliance with the NO_x emission limitations of Conditions 7.1.4(a)(ii), 7.1.4(e) and 7.1.4(f) is addressed by the continuous emission monitoring in accordance with Condition 7.1.8(c) and the relevant recordkeeping required by Condition 7.1.9(e).
- f. Compliance with the work practice and operating practice requirements of Condition 7.1.6(a) is addressed by the relevant recordkeeping required by Condition 7.1.9.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

7.1.13-1 Intentionally Blank.

7.1.13-2 Compliance Assurance Monitoring Requirements

- a. Pursuant to 40 CFR 64.7(a), the Permittee shall comply with the CAM requirements in Tables 7.1.13a below.
- b. Intentionally Blank.

- c. Pursuant to 40 CFR 64.7(a), the Permittee shall comply with the following CAM requirements and the requirements in Conditions 7.1.13-2(d) through (g).
 - i. Proper Maintenance and Continued Operation
 - A. Pursuant to 40 CFR 64.7(b), at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
 - B. Pursuant to 40 CFR 64.7(c), except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit (PSEU) is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The Permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
 - ii. Response to Excursions
 - A. Pursuant to 40 CFR 64.7(d)(1), upon detecting an excursion, the Permittee shall restore operation of the PSEU (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distributed control

system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

- B. Pursuant to 40 CFR 64.7(d)(2), determination of whether the Permittee has used acceptable procedures in response to an excursion will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

d. Recordkeeping

Pursuant to 40 CFR 64.9(b)(1), the Permittee shall maintain records of the monitoring data, monitor performance data, corrective actions taken, monitoring equipment maintenance, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under Conditions 7.1.9(c)(i) or 7.1.13-2 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

e. Reporting

Pursuant to Sections 39.5(7)(b) and (f) of the Act, the Permittee shall submit the following as part of the Quarterly Monitoring Reports required by Condition 7.1.10-2.

- i. Summary information on the number, duration, and cause of excursions, and the corrective actions taken, pursuant to 40 CFR 64.6(c)(3), 40 CFR 64.9(a)(2)(i), and Condition 7.1.10-2(d)(iv), except as otherwise provided in 40 CFR Part 64, including 64.7(d).
- ii. Summary information on the number, duration, and cause for monitoring equipment downtime incidents, other than downtime associated with calibration checks, pursuant to 40 CFR 64.6(c)(3), 40 CFR 64.9(a)(2)(ii), and Condition 7.1.10-2(d)(i) and (ii).

f. Quality Improvement Plans (QIP)

Pursuant to 40 CFR 64.8, based on the results of any future determination made under 40 CFR 64.7(d)(2), the Administrator or the Illinois EPA may require the Permittee to develop and implement a QIP under separate permit action, as appropriate, under Sections 39.5(14), (15), or (16) of the Act.

g. Need for Improved Monitoring

Pursuant to 40 CFR 64.7(e), if the Permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the Illinois EPA within 30 days of identification and, if necessary, submit to the Illinois EPA a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

Table 7.1.13 CAM Plan for Boiler NB-1 - 35 IAC 212.204

PSEU Designation:	Boiler 1 (NB-1)
Pollutant:	Particulate (PM) Emissions
Indicators:	#1) Opacity
General Criteria	
The Monitoring Approach Used to Measure the Indicators:	Opacity is measured using a transmissometer. The transmissometer measures the opaqueness of the flue gas exhaust using a beam of light that traverses the stack diameter, which generates an electrical signal that is proportional to the opacity.
The Indicator Range Which Provides a Reasonable Assurance of Compliance:	An excursion is defined as an event during which a measured opacity exceeds 20 percent, based on a three-hour rolling average of COMS data, excluding those events defined as startup, shutdown or malfunction. The opacity indicator level has been established at a level that provides reasonable assurance that particulate matter emissions are in compliance when opacity is equal to or less than the indicator level.
Quality Improvement Plan (QIP) Threshold Levels:	A QIP is not being considered at the time of this CAM Plan submission. Currently, there is no indication of any deficiencies in the monitoring approach selected. The COMS monitoring requirements provide the specific QA/QC procedures for data collection, recordkeeping and reporting for determining "reasonable" assurance of compliance with the applicable PM limitation.
Performance Criteria	
The Specifications for Obtaining Representative Data:	The COMS are installed at representative locations in the exhaust stack per 40 CFR Part 60, Appendix B, PS-1 requirements.
Verification Procedures to Confirm the Operational Status of the Monitoring:	N/A. The COMS were installed and qualified for use to determine compliance with state opacity standards. Verification Procedures are not necessary.
Quality Assurance and Quality Control (QA/QC) Practices that Ensure the Validity of the Data:	40 CFR Part 60, Appendix B, Performance Specification 1 and 40 CFR Part 75 QA/QC procedures.
The Monitoring Frequency:	Opacity is measured continuously. Opacity data is reduced in accordance with procedures in 40 CFR 60.13.
The Data Collection Procedures That Will Be Used:	The three-hour rolling average is calculated and reported in the CEM Data Acquisition System. Alarm set points are established to alert operators of problems.
The Data Averaging Period For Determining Whether an Excursion Has Occurred:	Three-hour rolling averages

7.2 Coal Handling Equipment

7.2.1 Description

The Permittee transfers and stores coal in a series of operations, including railcar and truck unloading, various conveyor belts (with associated hoppers, diverters, and transfer points), storage piles (with stackers and feeders), and bunkers. As a part of handling, the coal may be passed through "crackers" designed to break apart frozen coal. Particulate matter (PM) emissions associated with these operations are controlled by various measures such as the moisture content of the coal, dust suppression, enclosures and covers, and dust collection devices.

Note: The description in Condition 7.2.1 is for informational purposes only and implies no limits or constraints.

7.2.2 List of Emission Units

Coal Transfer Conveyors
Coal Storage Piles
Coal Storage Bunkers
Truck Unloading
Railcar Unloading
Stacker/Reclaimer

7.2.3 Applicability Provisions

- a. The "affected operations" for the purpose of these unit-specific conditions are the emission units that are used solely for the purpose of transferring coal or other solid fuel from one location to another or for storage of coal or other solid fuel, without changing the size of the fuel, e.g., by crushing or screening, as described in Conditions 7.2.1 and 7.2.2.
- b. Subject to the following provisions, the Permittee is authorized to continue operation of an affected operation in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123) in the event of a malfunction or breakdown of an affected operation. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.
 - i. This authorization only allows such continued operation as related to the operation of the coal-fired boiler as necessary to provide essential service or to prevent

injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.

- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable repair the affected operation, remove the affected operation from service or undertake other action so that excess emissions cease.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.2.9(e) and 7.2.10(b). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected operation out of service.
- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.2.4 Applicable Emission Standards

- a. The standard that addresses fugitive emissions, as defined by 35 IAC 211.2490, of the affected operations is set forth in Condition 5.2.2(a).
- b. The standard that addresses the opacity of the emission of smoke or other particulate matter from the affected operations is set forth in Condition 5.2.2(b).
- c. The affected processes listed below shall comply with 35 IAC 212.321(a): "no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source

or premises, exceeds the allowable emission rates specified in subsection (c) of [35 IAC 212.321]." Each unit, i.e., each conveyor, unloading operation, or storage bunker, shall demonstrate compliance individually. (See also Attachment 1.) [35 IAC 212.321(a)].

- i. Coal Transfer Conveyors
- ii. Coal Unloading by Railcar
- iii. Coal Unloading by Truck
- iv. Coal Storage Bunkers

7.2.5 Non-Applicability of Regulations of Concern

- a. The affected operations listed below are not subject to 35 IAC 212.321 or 212.322 because of the disperse nature of the operations, as generally addressed by 35 IAC 212.323.
 - i. Coal Storage Piles
 - ii. Rotary Stacker Reclaimer
- b. The affected operations are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM because the affected operations do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.
- c. The affected operations are not subject to the NSPS, "Standards of Performance for Coal Preparation and Processing Plants", 40 CFR 60 Subpart Y, because the affected operations were not constructed, reconstructed or modified after October 27, 1974, or May 27, 2009, as applicable.

7.2.6 Work Practices, Operational and Production Limits, and Emission Limitations

- a.
 - i. The Permittee shall implement and maintain the control measures for the affected operations such as enclosure, natural surface moisture, application of dust suppressant, and use of dust collection devices, for emissions of particulate matter to support periodic monitoring for the applicable requirements in Conditions 7.2.4 and 7.2.6(b), pursuant to Section 39.5(7)(a) of the Act.
 - ii. The control measures implemented and maintained shall be identified and operated in conformance with the "Control Measures Record" required by Condition 7.2.9(b)(i) to satisfy Condition 7.2.6(a)(i), which record is incorporated by reference into this permit by Condition 5.2.7.

b. Pursuant to Construction Permit 98080051:

- i. The amount of coal received shall not exceed 6.0 million tons per year [T1].
- ii. The amount of coal placed on the storage piles shall not exceed 2.25 million tons per year [T1].
- iii. Pursuant to 39.5(7)(a) of the Act, the following total PM emission limits for the coal handling operations supersede the total PM emission limits of Construction Permit 98080051, issued November 23, 1998:

The affected operations shall not exceed the following PM emission limits [T1R]:

<u>Operation</u>	<u>PM Emissions (Tons/Year)</u>
Railcar Unloading	3.0
Modified Transfer System	37.5
Storage Pile - Stack Out	19.0
Storage Pile - Reclaiming	22.5
Sample House - Conveyor Room	<u>30.0</u>
Total:	112.0

- iv. Compliance with limitations set forth in Conditions 7.2.6(b)(i) and (ii) shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].
- c. Pursuant to Construction Permit 98080051, the upgraded coal handling system shall be operated in accordance with good operating practices to minimize particulate matter emissions including the following [T1]:
- i. Enclosures shall be maintained in good condition and dust suppressant shall be applied as needed whenever coal is being moved past a point of application.
 - ii. The preferred method of handling coal shall be immediate storage in the bunkers. Coal shall only be placed in the storage pile as necessary, e.g., lack of bunker space, maintenance of the reserve fuel supply or rotation of this reserve, breakdown of the transfer system to the bunker, etc.
 - iii. The bucket wheel stacker/reclaimer shall be used as the principal means for transfer of coal to and from the storage pile and shall be maintained and operated to minimize dust emission.

- iv. The telescopic chute stack out system and pit reclaim shall be maintained and operated to minimize dust emissions, including localized application of suppressant to coal being reclaimed as needed to prevent visible emission during reclaiming.
- v. Remedial actions shall be taken if visible emissions are observed outside of any enclosure or building.

7.2.7 Opacity Observation Requirements

- a. i. The Permittee shall have the opacity of the emissions from the affected operations during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.
 - A. For each affected operation, observations shall be conducted every third year.
 - B. Upon written request by the Illinois EPA, such observations shall be conducted for specific affected operation(s) not later than 45 calendar days after the Permittee has received the request or on such later date agreed to by the Illinois EPA.
- ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are each not greater than 10.0 percent.
- iii. A. For each set of observations required by Conditions 7.2.7(a)(i)(A) and (B), the Permittee shall notify the Illinois EPA at least 7 days in advance of the date of the first observation(s).
B. The Permittee shall promptly notify the Illinois EPA of any changes in the date of the first observation(s).
- iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observation(s), if Illinois EPA personnel are present.
- v. The Permittee shall submit a written report for these observations not later than 30 days after the date of completion of each set of opacity observations required by Conditions 7.2.7(a)(i)(A) and (B). The report shall include a copy of the current Reference Method 9 certification of each observer and shall identify the observer's current employer. This report shall also include the following for each observation:

- A. Identification of the affected operation for which observations were conducted.
- B. Date and time of observations.
- C. Description of observation condition, including recent weather.
- D. Description of the operating conditions of the affected operations.
- E. Raw data.
- F. Opacity determinations.
- G. Conclusions.

7.2.8 Inspection Requirements

- a. Pursuant to Construction Permit 98080051, the Permittee shall perform inspections of the affected operations on at least a monthly basis, to confirm compliance with the requirements of Condition 7.2.6(a). If an affected operation is not in use during an inspection, this shall be noted in the inspection record. The records required by Condition 7.2.9(d) for these inspections shall be signed off by supervisory or management personnel. [T1].
- b. As part of the inspections required by Condition 7.2.8(a), the Permittee shall perform observations of the affected operation(s) for visible emissions in accordance with 35 IAC 212.107 to demonstrate compliance with the requirements of Condition 7.2.4(b), unless the Permittee elects to perform Reference Method 9 observations in accordance with Condition 7.2.7(a). These observations may be scheduled so that only a number of affected operations are reviewed during each inspection, provided, however, that all affected operations that are in routine service shall be observed at least once during each calendar year in which it is in use. If visible emissions are observed, the Permittee shall take corrective action within 2 hours to return the status of the operations to no visible emission or shall conduct observations of opacity by Reference Method 9 within one week in accordance with Condition 7.2.7(a). If the Permittee performs Reference Method 9 observations under this Condition 7.2.8(b), such observations are not subject to the notice and reporting requirements of Conditions 7.2.7(a)(iii) through (v) [Sections 39.5(7)(a) and (d) of the Act].
- c. Pursuant to 39.5(7)(b) and (d) of the Act, the Permittee shall perform a visual survey of the coal storage pile operations as follows:

- i. Coal storage pile operations shall be visually surveyed at least twice a month between May 1st and November 30th of each calendar year.
- ii. Coal storage pile operations shall be visually surveyed on at least a monthly basis at all other times during the calendar year.
- iii. As part of these visual surveys, the Permittee shall perform an observation of the coal storage pile operations for visible emissions in accordance with 35 IAC 212.107 unless the Permittee elects to perform a Reference Method 9 observation. [Sections 39.5(7)(b) and (d) of the Act].
 - A. The overall duration of any observation for visible emissions shall be at least 10 minutes.
 - B. The duration of any Reference Method 9 observation shall be at least 6 minutes.
- iv. If visible emissions from the coal storage pile are observed going beyond the property boundary or the average opacity of the Reference Method 9 observation is greater than 20% at the storage pile, the Permittee shall take action within 2 hours, if necessary, to ensure that fugitive particulate matter emissions do not exceed 30% opacity.
- v. The Permittee shall maintain records of the following for each visual survey:
 - A. Date and time the visual survey was performed and name(s) of personnel performing the visual survey.
 - B. The observed activity and condition of the coal storage pile, including the presence of any visible emissions and the recent weather conditions.
 - C. A summary of any emission control activities performed on the coal storage pile since the last visual survey.
 - D. A description of any action taken if visible emissions were observed crossing the property boundary, including whether action took place within 2 hours of the observation. The record in this Condition 7.2.8(c)(v)(D) shall be signed off by supervisory or management personnel.
- d. The Permittee shall perform and document an inspection of the railcar unloader baghouses to confirm proper condition and operation prior to commencing unloading of each train set (i.e., a coal unit train). This inspection shall include

recording and verifying that the monitored baghouse differential pressure is within the operating range specified in the record required by Condition 7.2.9(b)(i) and that visible emissions are not observed in the baghouse exhaust [Sections 39.5(7)(a) and (d) of the Act].

7.2.9 Recordkeeping Requirements

Pursuant to Sections 39.5(7)(a) and (e) of the Act:

- a. The Permittee shall maintain records of the following for the affected operations:
 - i. Maximum operating capacity of each affected operation, (tons/hour).
 - ii. Information related to any baghouses associated with the affected operations, including available design control efficiency or performance specifications and maximum design particulate matter emissions, gr/dscf, with supporting information, which information shall be kept up to date.
 - iii. Maintenance and repair record(s) for the air pollution control equipment associated with the affected operations, including dust suppressant application systems, which record(s) shall list the activities performed on each item of equipment or system, with date and description. (See also Condition 9.6.1, Control Equipment Maintenance Records.)
- b.
 - i. The Permittee shall maintain a record, which shall be kept up to date, to reflect any changes that the Permittee may elect to make, that contains the following for each affected operation for which a control measure(s) must be implemented and maintained pursuant to Condition 7.2.6(a)(i).
 - A. The type of emission unit (conveyor, storage pile, etc.) and the Permittee's designation for each emission unit with a description of the emission points on the emission unit;
 - B. Whether the emission unit is considered to be an "affected facility" for purposes of the NSPS, with copies of supporting documentation;
 - C. Description of the primary control measures that are utilized, with a description of the control measure and estimated frequency of application, if not continuous. If the primary control device is a baghouse, identification of the normal operating range for the differential pressure across the baghouse; and

- D. Description of any secondary control measures that would be used based on circumstances (freezing temperatures, recent rain, dry weather, etc.) with identification of the circumstances in which they would be used and whether they would take the place of or supplement the primary control measures.
- ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the control measures identified in the record required by Condition 7.2.9(b)(i) are sufficient to assure compliance with the emission limitations in Condition 7.2.6(b)(iii) (tons/year), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. This demonstration shall include the information addressed by Condition 7.2.9(a)(i) and (ii), emission factors for uncontrolled PM emissions, and/or controlled PM emissions published by USEPA or other credible sources.
- iii. A copy of the record required by Condition 7.2.9(b)(i) shall be submitted to the Illinois EPA not later than 60 days after the effectiveness of Condition 7.2.9(b)(i). Any subsequent revisions to this record related to control measures or affected operations, including their method of operation, shall be submitted not later than 30 days after the date of the revision. Upon request by the Illinois EPA, the Permittee shall submit other relevant information related to the control measures.
- c. The Permittee shall maintain the following operating records:
 - i. The Permittee shall maintain a record of the amount of coal received at the source, by type of fuel (tons/month and tons/year).
 - ii. The Permittee shall maintain a record of the amount of coal sent to the outdoor storage piles, by type of fuel (tons/month and tons/year).
- d. The Permittee shall maintain records of the following for the inspections required by Condition 7.2.8:
 - i. Date and time the inspection was performed, name(s) of inspection personnel, and specific affected operation(s) inspected.
 - ii. The observed condition of the control measures identified in the record required by Condition 7.2.9(b)(i) for each inspected affected operation, including the presence of any visible emissions or

atypical accumulations of coal fines in the vicinity of the operations.

- iii. A description of any maintenance or repair of equipment associated with the control measures identified in the record required by Condition 7.2.9(b)(i) that is recommended as a result of the inspection (and associated work order number(s)).
 - iv. A description of any corrective action taken if visible emissions were observed including whether corrective action took place within 2 hours of the observation and whether the status of the operation returned to no visible emissions.
 - v. For the baghouse inspection in Condition 7.2.8(c), a record of the actual differential pressure observed prior to unloading a Unit train and upon completion of the unloading of a Unit train.
- e. The Permittee shall maintain records of the following for each incident when any affected operation was in use without the control measure(s) required pursuant to the record required by Condition 7.2.9(b)(i) and each incident when an affected operation continued to operate during malfunction or breakdown with excess emissions or excess opacity as addressed by Condition 7.2.3(b):
- i. The date of the incident and identification of the affected operation(s) that was involved.
 - ii. A description of the incident, including the control measures that were not present or operated as required by the record identified in Condition 7.2.9(b)(i); other control measures that were operated, if any; the measures taken to minimize and correct deficiencies with chronology; and an explanation whether the emissions or opacity during the incident exceeded any applicable emission or opacity standard, as listed in Condition 7.2.4.
 - iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.
 - iv. The length of time after the incident was identified that the affected operations continued to operate before the control measures identified in the record required by Condition 7.2.9(b)(i) were in place or the operations were shut down (to resume operation only after such control measures were in place); an explanation of why continued operation was necessary; and, if this time was more than one hour, an explanation of why this time was not shorter, including

a description of any mitigation measures that were implemented during the incident.

- v. The estimated total duration of the incident, i.e., the total length of time that the affected operations ran without the control measure(s) required pursuant to the record required by Condition 7.2.9(b)(i) and the estimated amount of coal handled during the incident.
 - vi. A discussion of the probable cause of the incident and any preventative measures taken.
- f. The Permittee shall keep records for all opacity observations made in accordance with Reference Method 9 for the affected operations that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.2.7 (Opacity Observation Requirements), or otherwise the identity of the observer, a description of the observations that were made, the operating condition of the affected operation(s), the observed opacity, copies of the raw data sheets for the observations, and the reason for the opacity observations, e.g., Reference Method 9 opacity observations required by Condition 7.2.7(a)(i), written request by the Illinois EPA, or any required Reference Method 9 opacity observations following observations of visible emissions under Condition 7.2.8(b).
- g. To demonstrate compliance with Condition 7.2.6(b), the Permittee shall keep records of amount of coal received, amount of coal handled, and PM emissions (tons/month and tons/year) for the operations listed in 7.2.6(b)(iii), based on the records required by Condition 7.2.9(b)(ii) and 7.2.9(c).

7.2.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for the affected operations, as follows. Such notifications shall include a description of each incident and a discussion of the probable cause of deviation, any corrective actions taken, and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act.

- i. For those breakdown or malfunction opacity events that require notification and reporting pursuant to Condition 7.2.10(b)(i), notification and reporting shall be provided pursuant to Condition 7.2.10(b)(i) rather than 7.2.10(a).

- ii. Within 30 days after the conclusion of an incident in which the Permittee continued to operate an affected operation for more than 12 operating hours after discovering that emission control measures required by the record identified in Condition 7.2.9(b)(i) were not present or operating, the Permittee shall submit written notice to the Illinois EPA. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.2.9(e).
- iii. A. Except for events and incidents for which notification or reporting is required by Condition 7.2.10(a)(ii) or 7.2.10(b)(i), as referenced in 7.2.10(a)(i), all other notifications shall be submitted with the quarterly reports required by Condition 7.2.10(b)(ii).

B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in prior notifications and reports for such deviations.
- b. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA for incidents when operation of affected operation(s) continued with excess opacity during malfunction or breakdown as addressed by Condition 7.2.3(b).

- i. A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile or electronic mail, for each incident in which the opacity from an affected operation exceeds 30 percent for eight or more 6-minute averaging periods within a two hour period unless the Permittee has begun the shutdown by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.2.10(b)(ii).)
- B. Upon conclusion of each incident that is two hours or more in duration, the Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a copy of the records for the incident required by Condition 7.2.9(e).

- ii. The Permittee shall submit quarterly reports to the Illinois EPA that include the following information for incidents during the quarter in which affected operations continued to operate during malfunction or breakdown with excess emissions or excess opacity. These reports shall be submitted with the quarterly reports submitted for the coal-fired boiler pursuant to Condition 7.1.10-2(a).
 - A. A listing of such incidents, in chronological order, that includes:
 - I. The date, time, and duration of each incident,
 - II. The identity of the affected operation(s) involved in the incident, and
 - III. Whether a follow-up notice was submitted for the incident pursuant to Condition 7.2.10(b)(i)(B), with the date of the notice.
 - B. A description of the incident, discussion of probable cause of the incident, corrective actions taken, and any preventative measures taken; provided, however, that the Permittee need not resubmit information provided in a prior report for an incident, as identified above, but may elect to supplement the prior submittal.
 - C. The sum duration of all incidents during the quarter.
 - D. If there have been no such incidents during the calendar quarter, this shall be stated in the report.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational changes with respect to the affected operations without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or for an activity for which a permit is required pursuant to 35 IAC 201.142.

- a. Handling of solid fuels other than coal.
- b. Operation of additional dust suppressant systems.

- c. Operation of additional dust collection equipment.
- d. Operation of replacement dust suppression systems or dust collection equipment that is of equal or greater effectiveness in controlling visible emissions than the device(s) being replaced, as recognized in a Construction Permit for such system or equipment.

7.2.12 Compliance Procedures

- a. Compliance with Condition 7.2.4 is addressed by the observations, inspections, and recordkeeping required by Conditions 7.2.7(a), 7.2.8 and 7.2.9, respectively.
- b. Compliance with Condition 7.2.6(a) is addressed by the inspections and recordkeeping required by Conditions 7.2.8 and 7.2.9, respectively.
- c. Compliance with Condition 7.2.6(b) is addressed by the, inspections, and recordkeeping required by Conditions 7.2.8 and 7.2.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

7.3 Fly Ash Handling Equipment

7.3.1 Description

The Permittee operates a dry fly ash removal system that handles and stores fly ash collected at the coal-fired boiler. Associated particulate matter (PM) emissions are controlled by various control measures such as moisture content of the fly ash, enclosures and covers, and dust collection devices.

Note: The description in Condition 7.3.1 is for informational purposes only and implies no limits or constraints.

7.3.2 List of Emission Units and Air Pollution Control Equipment

The following is a list of the fly ash equipment and associated emission control systems at the source:

Emission Unit Description	Emission Control Equipment/Measures
Fly Ash Conveying System	Dust Collection Devices, Enclosures and Covers
Fly Ash Storage Silos	
Dry Fly Ash Loadout	Dust Collection Devices, Dust Suppression, Enclosures and Covers
Fly Ash Batch Mixer and Conditioned Ash Loadout	Wet Process, Enclosures and Chutes

7.3.3 Applicability Provisions

- a. An "affected process" for the purpose of these unit-specific conditions, is an individual process emission unit that handles fly ash as described in Conditions 7.3.1 and 7.3.2.
- b. Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected process in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123) and Condition 7.3.4(c) (35 IAC 212.321(a)) in the event of a malfunction or breakdown of an affected process. This authorization is provided pursuant to 35 IAC 201.149, 201.261, and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.
 - i. This authorization only allows such continued operation as related to the operation of the coal-fired boiler as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and

does not extend to continued operation solely for the economic benefit of the Permittee.

- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable repair the affected process, remove the affected process from service, or undertake other action so that excess emissions cease.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.3.9(e) and 7.3.10(b). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected process out of service.
- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.3.4 Applicable Emission Standards

- a. The standard that addresses fugitive emissions, as defined by 35 IAC 211.2490, of the affected processes is set forth in Condition 5.2.2(a).
- b. The standard that addresses the opacity of the emission of smoke or other particulate matter from the affected processes is set forth in Condition 5.2.2(b).
- c. The affected processes shall comply with 35 IAC 212.321(a):
"no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection

(c) of [35 IAC 212.321]". Each unit, i.e. each fly ash conveyance system, fly ash silo, or fly ash wet mixing system, shall demonstrate compliance individually. (See also Attachment 1.) [35 IAC 212.321(a)]

7.3.5 Non-Applicability of Regulations of Concern

- a. The affected processes are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM, because the affected processes do not have potential pre-control device emissions of the applicable regulated air pollutant that equal or exceed major source threshold levels.

7.3.6 Work Practices, and Emission Limitations

- a. i. The Permittee shall implement and maintain the control measures for the affected processes, such as enclosure, for emissions of particulate matter to support periodic monitoring for the applicable requirements in Conditions 7.3.4, pursuant to Section 39.5(7)(a) of the Act.
- ii. The control measures implemented and maintained shall be identified and operated in conformance with the "Control Measures Record" required by Condition 7.3.9(b)(i) to satisfy Condition 7.3.6(a)(i), which record is incorporated by reference into this permit by Condition 5.2.7.
- b. Pursuant to Construction Permit 02120049, PM emissions from the fly ash batch mixer shall not exceed 1.0 pound per hour and 4.4 tons per year. [T1].

7.3.7 Opacity Observations and Emission Testing Requirements

- a. i. The Permittee shall have the opacity of the emissions from the affected processes during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.
 - A. For each affected process, observations shall be conducted every third year.
 - B. Upon written request by the Illinois EPA, such observations shall be conducted for specific affected process(es) not later than 45 calendar days after the Permittee has received the request or on such later date agreed to by the Illinois EPA.
- ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes

of observations (two six-minute averages) are each not greater than 10.0 percent.

- iii. A. For each set of observations required by Conditions 7.3.7(a)(i)(A) and (B), the Permittee shall notify the Illinois EPA at least 7 days in advance of the date of the first observation(s).
- B. The Permittee shall promptly notify the Illinois EPA of any changes in the date of the first observation(s).
- iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observation(s), if Illinois EPA personnel are present.
- v. The Permittee shall submit a written report for these observations not later than 30 days after the date of completion of each set of opacity observations required by Conditions 7.3.7(a)(i)(A) and (B). The report shall include a copy of the current Reference Method 9 certification of each observer and shall identify the observer's current employer. This report shall also include the following for each observation:
 - A. Identification of the affected process for which observations were conducted.
 - B. Date and time of observations.
 - C. Description of observation conditions, including recent weather.
 - D. Description of the operating conditions of the affected processes.
 - E. Raw data.
 - F. Opacity determinations.
 - G. Conclusions.
- b. i. Within 90 days after the Permittee has received a written request from the Illinois EPA, the Permittee shall have the PM emissions at the stacks or vents of the affected processes, as specified in such request, measured during representative operating conditions, as set forth below, pursuant to Section 39.5(7)(d) of the Act.
- ii. A. Testing shall be conducted using appropriate Reference Methods, including Method 5 or 17 for PM emissions.

- B. Compliance may be determined from the average of three valid test runs, subject to the limitations and conditions contained in 35 IAC Part 283.
- iii. The Permittee shall submit a test plan as required by Condition 8.6.2.
- iv. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may, at its discretion, accept notification with shorter advance notice provided that the Illinois EPA will not accept such notification if it interferes with the Illinois EPA's ability to observe the testing.
- v. The Permittee shall expeditiously submit complete final report(s) for required emission testing to the Illinois EPA, no later than 90 days after the date of testing. These reports shall include the information specified in Condition 8.6.3 and a detailed description of the operating conditions of those affected processes during testing, including operating rate (tons/hr) and the control devices being used.

7.3.8 Inspection Requirements

- a. The Permittee shall perform inspections as follows to confirm compliance with the requirements of Condition 7.3.6(a) [Sections 39.5(7)(a) and (d) of the Act].
 - i. Affected processes other than loadout operations shall be inspected on at least a monthly basis.
 - ii. Affected loadout operations shall be inspected on at least a weekly basis.
 - iii. If an affected process is not in operation during an inspection, this shall be noted in the inspection record.
 - iv. The records required by Condition 7.3.9(d) for these inspections shall be signed off by supervisory or management personnel.
- b. As part of the inspections of Condition 7.3.8(a), the Permittee shall perform observations of the affected processes for visible emissions in accordance with 35 IAC 212.107 to demonstrate compliance with the requirements of Condition 7.3.4(b), unless the Permittee elects to perform Reference

Method 9 observations in accordance with Condition 7.3.7(a). These observations may be scheduled so that only a number of affected processes are reviewed during each inspection, provided, however, that each affected process that is in routine service shall be observed at least once during each calendar year in which it is operating other than loadout operations, which shall each be observed at least once during each calendar quarter in which such loadout operation is operating [Sections 39.5(7)(b) and (d) of the Act].

- c. If visible emissions are observed, the Permittee shall take corrective action within 2 hours to return the status of the process to no visible emission or shall conduct observations of opacity by Reference Method 9 within one week in accordance with Condition 7.3.7(a). If the Permittee performs Reference Method 9 observations under this Condition 7.3.8(b), such observations are not subject to the notice requirements of Conditions 7.3.7(a)(iii) through (v) [Sections 39.5(7)(b) and (d) of the Act].
- d. The Permittee shall perform and document an inspection of the fly ash transport baghouses to confirm proper condition and operation at least once per week. This inspection shall include recording and verifying that the monitored baghouse differential pressure is within the operating range specified in the record required by Condition 7.3.9(b)(i) and that visible emissions are not observed in the baghouse exhaust [Sections 39.5(7)(a) and (d) of the Act].

7.3.9 Recordkeeping Requirements

Pursuant to Sections 39.5(7)(a) and (e) of the Act:

- a. The Permittee shall maintain records of the following for the affected processes:
 - i. Maximum operating capacity of each affected process (tons/hour).
 - ii. Information related to any baghouses associated with the affected processes, including available design control efficiency or performance specifications and maximum design particulate matter emissions, gr/dscf, with supporting information, which information shall be kept up to date.
 - iii. Maintenance and repair record(s) for the air pollution control equipment associated with the affected processes, including dust suppressant application systems, which record(s) shall list the activities performed on each item of equipment or system, with date and description. (See also Condition 9.6.1, Control Equipment Maintenance Records.)

- b. i. The Permittee shall maintain a record, which shall be kept up to date to reflect any changes that the Permittee may elect to make, that contains the following for each affected process for which a control measure must be implemented and maintained pursuant to Condition 7.3.6(a)(i).
 - A. The type of emission unit (pneumatic transfer system, silos, etc.) and the Permittee's designation for each emission unit with a description of the emission points on the emission unit;
 - B. Description of the primary control measures that are utilized, with a description of the control measure and estimated frequency of application, if not continuous. If the primary control device is a baghouse, identification of the normal operating range for the differential pressure across the baghouse; and
 - C. Description of any secondary control measures that would be used based on circumstances (freezing temperatures, recent rain, dry weather, etc.) with identification of the circumstances in which they would be used and whether they would take the place of or supplement the primary control measures.
- ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the control measures identified in the record required by Condition 7.3.9(b)(i) are sufficient to assure compliance with Condition 7.3.4(c) at the maximum process weight rate at which each affected process can be operated (tons fly ash/hour) and the emission limits in Condition 7.3.6(b), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. This demonstration shall include the information addressed by Conditions 7.3.9(a)(i) and (ii), results of any testing conducted in accordance with 7.3.7(b), emission factors for uncontrolled PM emissions, and/or controlled PM emissions published by USEPA or other credible sources.
- iii. A copy of the record required by Condition 7.3.9(b)(i) shall be submitted to the Illinois EPA not later than 60 days after the effectiveness of Condition 7.3.9(b)(i). Any subsequent revisions to this record related to control measures or affected processes, including their method of operation, shall be submitted not later than 30 days after the date of the revision. Upon request by the Illinois EPA, the Permittee shall

submit other relevant information related to the control measures.

- c. The Permittee shall maintain a record of the amount of fly ash handled by the affected processes (tons/month and tons/year).
- d. The Permittee shall maintain records of the following for the inspections required by Condition 7.3.8:
 - i. Date and time the inspection was performed, name(s) of inspection personnel, and specific affected process(es) inspected.
 - ii. The observed condition of the control measures identified in the record required by Condition 7.3.9(b)(i) for each inspected affected process, including the presence of any visible emissions or atypical accumulations of fly ash in the vicinity of the process.
 - iii. A description of any maintenance or repair of equipment associated with control measures identified in the record required by Condition 7.3.9(b)(i) that is recommended as a result of the inspection and associated work order number(s).
 - iv. A description of any corrective action taken if visible emissions were observed, including whether corrective action took place within 2 hours of the observation and whether the status of the process returned to no visible emissions.
 - v. For the baghouse inspection in Condition 7.3.8(d), a record of the actual differential pressure observed.
- e. The Permittee shall maintain records of the following for each incident when any affected process operated without the control measure(s) required pursuant to the record required by Condition 7.3.9(b)(i) and each incident when an affected process continued to operate during malfunction or breakdown with excess emissions or excess opacity as addressed by Condition 7.3.3(b):
 - i. The date of the incident and identification of the affected process(es) that was involved.
 - ii. A description of the incident, including the control measure(s) that was not present or operated as required by the record identified in Condition 7.3.9(b)(i); other control measures that were operated, if any; the measures taken to minimize and correct deficiencies with chronology; and an explanation whether the emissions or opacity during the incident exceeded any applicable emission or opacity standard, as listed in Condition 7.3.4.

- iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.
 - iv. The length of time after the incident was identified that the affected processes continued to operate before the control measures required by the record identified in Condition 7.3.9(b)(i) were in place or the processes were shut down (to resume operation only after such control measures were in place); an explanation of why continued operation was necessary; and, if this time was more than one hour, an explanation of why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.
 - v. The estimated total duration of the incident, i.e., the total length of time that the affected processes ran without the control measure(s) required pursuant to the record required by Condition 7.3.9(b)(i) and the estimated amount of fly ash handled during the incident.
 - vi. A discussion of the probable cause of the incident and any preventative measures taken.
- f. The Permittee shall keep records for all opacity observations made in accordance with Reference Method 9 for the affected processes that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.3.7 (Opacity Observation and Emission Testing Requirements) or otherwise the identity of the observer, a description of the observations that were made, the operating condition of the affected process(es), the observed opacity, copies of the raw data sheets for the observations, and the reason for the opacity observations, e.g., Reference Method 9 opacity observations required by Condition 7.3.7(a)(i), written request by the Illinois EPA, or any required Reference Method 9 opacity observations following observations of visible emissions under Condition 7.3.8(b).
- g. To demonstrate compliance with Condition 7.3.6(b), the Permittee shall keep records for PM emissions of the fly ash batch mixer (tons/month and tons/year) based on the records required by Condition 7.3.9(b)(ii) and 7.3.9(c).

7.3.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for the affected

processes, as follows. Such notifications shall include a description of each deviation and a discussion of the probable cause of deviation, any corrective actions taken, and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act.

- i. For those breakdown or malfunction PM and opacity events that require notification and reporting pursuant to Condition 7.3.10(b)(i), notification and reporting shall be provided pursuant to Condition 7.3.10(b)(i) rather than 7.3.10(a).
- ii. Within 30 days after the conclusion of an incident in which the Permittee continued to operate an affected process for more than 12 operating hours after discovering that emission control measures required by the record identified in Condition 7.3.9(b)(i) were not present or operating, the Permittee shall submit written notice to the Illinois EPA. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.3.9(e).
- iii. A. Except for events and incidents for which notification or reporting is required by Condition 7.3.10(a)(ii) or 7.3.10(b)(i), as referenced in 7.3.10(a)(i), all other notifications shall be submitted with the quarterly reports required by Condition 7.3.10(b)(ii).

B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in prior notifications and reports for such deviations.

b. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA for incidents when operation of an affected process(es) continued with excess emissions or excess opacity during malfunction or breakdown as addressed by Condition 7.3.3(b).

- i. A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile, or electronic mail, for each incident in which the opacity from an affected process exceeds 30 percent for eight or more 6-minute averaging periods within a two hour period unless the Permittee has begun the shutdown by such time. (Otherwise, if opacity during an incident only

exceeds 30 percent for no more than seven 6-minute averaging periods, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.3.10(b)(ii).)

- B. Upon conclusion of each incident that is two hours or more in duration, the Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a copy of the records for the incident required by Condition 7.3.9(e).
- ii. The Permittee shall submit quarterly reports to the Illinois EPA that include the following information for incidents during the quarter in which affected processes continued to operate during malfunction or breakdown with excess emissions or excess opacity. These reports shall be submitted with the quarterly reports submitted for the coal-fired boiler pursuant to Condition 7.1.10-2(a).
 - A. A listing of such incidents, in chronological order, that includes:
 - I. The date, time, and duration of each incident;
 - II. The identity of the affected process(es) involved in the incident; and
 - III. Whether a follow-up notice was submitted for the incident pursuant to Condition 7.3.10(b)(i)(B), with the date of the notice.
 - B. A description of the incident, discussion of probable cause of the incident, corrective actions taken, and any preventative measures taken; provided, however, that the Permittee need not resubmit information provided in a prior report for an incident, as identified above, but may elect to supplement the prior submittal.
 - C. The sum duration of all incidents during the quarter.
 - D. If there have been no such incidents during the calendar quarter, this shall be stated in the report.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational changes with respect to the affected processes without prior notification to the Illinois EPA or revision of

this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or for an activity for which a permit is required pursuant to 35 IAC 201.142.

- a. Operation of additional dust control measures.
- b. Operation of replacement dust control measures that are of equal or greater effectiveness in controlling visible emissions than the measures being replaced, as recognized in a Construction Permit for such measures.

7.3.12 Compliance Procedures

- a. Compliance with Condition 7.3.4 is addressed by the observations, inspections, and recordkeeping required by Conditions 7.3.7(a), 7.3.8, and 7.3.9, respectively.
- b. Compliance with Condition 7.3.6 is addressed by the inspections and recordkeeping required by Conditions 7.3.8 and 7.3.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

7.4 Gasoline Storage Tank

7.4.1 Description

The 1,000 gallon capacity storage tank with submerged loading pipe is associated with non-retail dispensing of gasoline for plant vehicles and equipment.

Note: The description in Condition 7.4.1 is for informational purposes only implies no limits or constraints.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit Description	Emission Control Equipment/Measures
Gasoline Storage Tank with Submerged Loading Pipe	None

7.4.3 Applicability Provisions

An "affected storage tank" for the purpose of these unit-specific conditions, is a storage tank described in Conditions 7.4.1 and 7.4.2.

7.4.4 Applicable Emission Standards

- a. The affected storage tank is subject to 35 IAC 215.122(b) and 215.583(a)(1), which provide that:
 - i. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe, or satisfies one of several other compliance options as specified in 35 IAC 215.122(b).

Note: The exception to this standard at 35 IAC 215.122(c) is not applicable because the vapor pressure of gasoline is greater than 17.24 kPa (2.5 psia) at 294.3°K (70°F).

- ii. No person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank at a gasoline dispensing facility unless the tank is equipped with a submerged loading pipe [35 IAC 215.583(a)(1)].

7.4.5 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected storage tank not being subject to the New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels), 40 CFR Part 60, Subpart Kb,

because the capacity of the tank is less than 40 cubic meters (10,566 gallons).

- b. This permit is issued based on each affected storage tank not being subject to 35 IAC 215.121, because the capacity of the affected storage tank is less than 40,000 gallons.
- c. This permit is issued based on each affected storage tank not being subject to 35 IAC 215.122(a), because the capacity of the affected storage tank is less than 40,000 gallons.
- d. The requirements of 35 IAC 215.583(a)(2) do not apply to transfers of gasoline to the affected storage tank because the storage tank is not located in any of the following counties: Boone, Peoria, Rock Island, Tazewell, or Winnebago [35 IAC 215.583(b)].
- e. The affected gasoline storage tank is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for VOM because the affected storage tank does not use add-on controls to achieve compliance with any applicable emission limits.
- f. The affected storage tank is not subject to the National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities, 40 CFR Part 63, Subpart CCCCCC, because the gasoline storage tank is not located at an Area Source for Hazardous Air Pollutants.

7.4.6 Operational Limits

- a. The affected storage tank shall be equipped and operated with a submerged loading pipe or an equivalent device approved by the Illinois EPA, pursuant to 35 IAC 215.122(b) and 215.583(a). (The Illinois EPA has not approved use of other equivalent equipment in lieu of a submerged loading pipe.)

7.4.7 Emission Testing Requirements

None

7.4.8 Inspection Requirements

Not later than May 1 of each calendar year, the Permittee shall conduct an inspection of the affected storage tank to review its physical condition and ability to comply with the applicable equipment requirements of Conditions 7.4.6(a), pursuant to Sections 39.5(7)(a) and (d) of the Act.

7.4.9 Recordkeeping Requirements

The Permittee shall maintain records of the following for the affected storage tank, pursuant to Section 39.5(7)(a) and (e) of the Act:

- a. Design information for the capacity of the tank and the presence of a permanent submerged loading pipe.
- b. Operating record(s) or other records for the affected tank that shall include the following:
 - i. Information documenting performance of the inspections that are required by Condition 7.4.8, including date and description of the inspection, confirmation of the adequacy of the specific features of the tank required for control of emissions, and identification of any such features that are not in proper working order or otherwise deficient, with recommendations for maintenance, repair or replacement.
 - ii. Information identifying deviations from applicable equipment requirements, with a detailed description and explanation.
- c. Maintenance and repair records for the affected storage tank, as related to the repair or replacement of the loading pipe.
- d. Records for each shipment of material loaded into the affected storage tank, including type of material and amount.
- e. Throughput of material, gal/mo and gal/yr, by type of material.

7.4.10 Reporting Requirements

For the affected storage tank, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as follows. Such notifications shall include a description of each incident and a discussion of the probable cause of deviation, any corrective actions taken and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act:

- a. The Permittee shall submit written notice to the Illinois EPA within 30 days after any filling of an affected storage tank that was not in compliance with the requirements of Conditions 7.4.4 or 7.4.6, i.e., that was conducted without a submerged loading pipe.
- b. The Permittee shall notify the Illinois EPA through the quarterly reports required by Condition 7.1.10-2(a) for deviations from applicable recordkeeping requirements.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected storage tank without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (1) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly

obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or for any activity constituting construction or modification as defined in 35 IAC 201.102.

- a. Changes to components related to the submerged loading pipe, including addition of new components and repair and replacement of components.
- b. Changes in the material stored in the affected storage tank.

7.4.12 Compliance Procedures

- a. Compliance with Condition 7.4.4(a) is addressed by the use of a submerged loading pipe as required in Condition 7.4.6(a) and by the inspections and recordkeeping required by Conditions 7.4.8 and 7.4.9, respectively.
- b. Compliance with Condition 7.4.6 is addressed by the inspections and the recordkeeping required by Conditions 7.4.8 and 7.4.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is an affected source under Title IV of the CAA and is subject to requirements pursuant to Title IV of the CAA as specified in Section 6.2 of this permit. To the extent that the federal regulations promulgated under Title IV of the CAA, are inconsistent with the requirements of this permit, the federal regulations promulgated under Title IV of the CAA shall take precedence pursuant to Section 39.5(17)(j) of the Act.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;

- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
 - i. Describe the physical or operational change;
 - ii. Identify the schedule for implementing the physical or operational change;
 - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
 - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
 - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the condition of this permit. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Conditions 8.6.3 and 8.6.4.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

Reports summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Illinois EPA every six months as follows, unless more frequent submittal of such reports is required in Section 7 of this permit [Section 39.5(7)(f) of the Act]:

Monitoring PeriodReport Due Date

January - June

September 1

July - December

March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determinations of emissions and operation that are intended to be made, including sampling and monitoring locations;
- e. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and
- g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;

- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests and/or analyses, with raw data and sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

- a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.
- b. As of the date of issuance of this permit, the addresses of the offices that should generally be utilized for the submittal of reports and notifications are as follows:

i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency
Bureau of Air
Compliance & Enforcement Section (MC 40)
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

OR

Illinois Environmental Protection Agency
Bureau of Air
Compliance & Enforcement Section (#40)
1021 North Grand Avenue East
Springfield, Illinois 62702

ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

iii. USEPA Region 5 - Air Branch

USEPA (AR - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604

c. Permit applications should be addressed to the Air Permit Section. As of the date of issuance of this permit, the address of the Air Permit Section is as follows:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Air Permit Section (MC 11)
1021 North Grand Avenue East
P.O. Box 19506
Springfield, Illinois 62794-9506

OR

Illinois Environmental Protection Agency
Division of Air Pollution Control
Air Permit Section (MC 11)
1021 North Grand Avenue East
Springfield, Illinois 62702

8.7 Title I Conditions

Notwithstanding the expiration date on the first page of this CAAPP permit, Title I conditions in this permit, which are identified by a T1, T1N, or T1R designation, remain in effect until such time as the Illinois EPA takes action to revise or terminate them in accordance with applicable procedures for action on Title I conditions. This is because these conditions either: (a) incorporate conditions of earlier permits that were issued by the Illinois EPA pursuant to authority that includes authority found in Title I of the Clean Air Act (T1 conditions), (b) were newly established in this CAAPP permit pursuant to authority that includes such Title I authority (T1N conditions), or (c) reflect a combination of conditions of such previous permits and revisions to those conditions established in this CAAPP permit (T1R conditions). (See also Condition 1.5.)

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

- 9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].
- 9.1.2 In particular, this permit does not alter or affect the following:
- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
 - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
 - d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.
- 9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance with, or violation of, any applicable requirement to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the Permittee, including, but not limited to, challenging the use of the USEPA's credible evidence rule in the context of any future proceeding consistent with *Clean Air Implementation Project v. EPA*, 150 F3d 1200 (D.C. Circuit 1998).

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application. [Section 39.5(7)(o)(i) of the Act]

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless this permit provides for such continued operation consistent with the Act and applicable Board regulations. [Section 39.5(6)(c) of the Act]

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.3 Obligation to Allow Illinois EPA Surveillance

Pursuant to Sections 4(b), 39.5(7)(a), and 39.5(7)(p)(ii) of the Act, upon presentation of credentials and other documents as may be required by law and in accordance with constitutional limitations, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following.

- a. Enter upon the Permittee's premises where the emission unit(s) are located, or emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.
- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
- d. Sample or monitor any substances or parameters at any location:
 - i. As authorized by the Clean Air Act, at reasonable times, for the purposes of assuring compliance with this CAAPP permit or applicable requirements; or
 - ii. As otherwise authorized by the Act.
- e. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving,

testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

9.4 Fees

The Permittee shall pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. Fees shall be paid by check sent to one of the following two addresses:

Illinois Environmental Protection Agency
Fiscal Services Section
1021 North Grand Avenue East
Springfield, IL 62702

OR

Illinois Environmental Protection Agency
Fiscal Services Section
P.O. Box 19276
Springfield, IL 62794-9276

9.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].

- b. Other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Air Quality Planning Section no later than May 1 of the following year, as required by 35 IAC Part 254 and Section 4(b) of the Act.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to: (1) the Illinois EPA, Air Compliance Section, and (2) the Illinois EPA, Air Regional Field Office. (The addresses for the submittal of these compliance certifications are provided in Condition 8.6.4.)

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- b. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act. [Section 39.5(7)(p)(i) of the Act] An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are

met through properly signed, contemporaneous operating records, or other relevant evidence:

- i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency;

Note: For this purpose, emergency means a situation arising from sudden and reasonably unforeseeable events beyond the control of the source, as further defined by Section 39.5(7)(k)(iv) of the Act.

- ii. The permitted source was at the time being properly operated;
- iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
- iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.

- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, revoked, reopened and reissued, or terminated for cause in accordance with applicable provisions of Section 39.5 of the Act. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or that inaccurate statement were made in establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation and reissuance under Section 39.5(15) of the Act, pursuant to Sections 39.5(5)(e) and (i) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, other portions of this permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and the rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

Newton Power Station
I.D. No.: 079808AAA
Permit No.: 95090066

Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of this CAAPP permit will remain in effect until the issuance of a renewal permit [Sections 39.5(5)(l) and (o) of the Act].

Note: Pursuant to Sections 39.5(5)(h) and (n) of the Act, upon submittal of a timely and complete renewal application, the permitted source may continue to operate until final action is taken by the Illinois EPA on the renewal application, provided, however, that this protection shall cease if the applicant fails to submit any additional information necessary to evaluate or take final action on the renewal application as requested by the Illinois EPA in writing. For a renewal application to be timely, it must be submitted no later than 9 months prior to the date of permit expiration.

9.15 General Authority for the Terms and Conditions of this Permit

The authority for terms and conditions of this permit that do not include a citation for their authority is Section 39.5(7)(a) of the Act, which provides that the Illinois EPA shall include such provisions in a CAAPP permit as are necessary to accomplish the purposes of the Act and to assure compliance with all applicable requirements. Section 39.5(7)(a) of the Act is also another basis of authority for terms and conditions of this permit that do include a specific citation for their authority.

Note: This condition is included in this permit pursuant to Section 39.5(7)(n) of the Act.

10.0 ATTACHMENTS

10.1 Attachment 1 Emissions of Particulate Matter from New Process Emission Units

35 IAC 212.321 - Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972

- a) Except as further provided in this Part, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.
- b) Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

- 1) Up to process weight rates of 408 MG/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

- 2) For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

- c) Limits for Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

10.2 Attachment 2 Emissions of Particulate Matter from Existing Process Emission Units

35 IAC 212.322 - Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972

- a) Except as further provided in this Part, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.
- b) Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

- 1) For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

- 2) For process weight rates in excess of 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

- c) Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972

	Metric	English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

where:

P = Process weight rate in Mg/hr or T/hr, and

E = Allowable emission rate in kg/hr or lbs/hr.

10.3 Attachment 3 - Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

10.4 Attachment 4 - Guidance

The Illinois has prepared guidance for sources on the Clean Air Act Permit Program (CAAPP) that is available on the Internet site maintained by the Illinois EPA, www.epa.state.il.us. This guidance includes instructions on applying for a revision or renewal of the CAAPP permit.

Guidance On Revising A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-revising.pdf

Guidance On Renewing A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-renewing.pdf

The application forms prepared by the Illinois EPA for the CAAPP are also available from the Illinois EPA's Internet site:

www.epa.state.il.us/air/caapp/index.html

These CAAPP application forms should also be used by a CAAPP source when it applies for a construction permit. For this purpose, the appropriate CAAPP application forms and other supporting information, should be accompanied by a completed Application For A Construction Permit Form (CAAPP Form-199).

Application For A Construction Permit Form (CAAPP Form-199):

www.epa.state.il.us/air/caapp/199-caapp.pdf

10.5 Attachment 5 - Acid Rain Program Permit

217-782-2113

**ACID RAIN PROGRAM
PERMIT**

Illinois Power Generating Company
 Attn: Alan Bogardus, Designated Representative
 1500 Eastport Plaza Drive
 Collinsville, Illinois 62234

Oris No.: 6017
 IEPA I.D. No.: 079808AAA
 Source/Unit: Newton Power Station/ Unit 1
 Date Received: October 23, 2015
 Date Issued: May 23, 2017
 Effective Date: January 1, 2016
 Expiration Date: November 19, 2020

STATEMENT OF BASIS:

In accordance with Section 39.5(17) if the Illinois Environmental Protection Act and Titles IV and V of the Clean Air Act, the Illinois Environmental Protection Agency is issuing this Acid Rain Program Permit, including requested revisions, to Illinois Power Generating Company for its Newton Power Station.

SULFUR DIOXIDE (SO₂) ALLOCATIONS AND NITROGEN OXIDES (NO_x) LIMITS FOR THE AFFECTED UNIT:

UNIT 1 (NB-1)	SO ₂ Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73*	Years 2016 and Beyond
		15,625
	NO _x Limit	0.45 lb/mmBtu

* Also includes return of repowering deduction of 5 allowances, which were returned by USEPA on October 30, 2000.

PERMIT APPLICATION: The permit application, including the NO_x Compliance Plan, is attached and incorporated as part of this permit. The Permittee must comply with the standard requirements and special provisions set forth in the application.

COMMENTS, NOTES, AND JUSTIFICATIONS: This permit contains provisions related to SO₂ emissions and requires the Permittee to hold SO₂ allowances under the federal Acid Rain program to account for SO₂ emissions from the affected unit. An allowance is a limited authorization to emit up to one ton of SO₂ during or after a specified calendar year. The transfer of allowances to and from the unit account does not necessitate a revision to the unit SO₂ allocations denoted in this permit (See 40 CFR 72.84).

This permit contains provisions related to NO_x emissions requiring the affected unit to comply with applicable emission limitations for NO_x under the Acid Rain program. In addition to the described NO_x compliance plan, Newton Unit 1 shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.

This permit does not affect the source's responsibility to meet all other applicable local, state and federal requirements, including state requirements under 35 Ill. Adm.

Code Part 217 Subpart V, and 35 Ill. Adm. Code Part 225, which addresses NO_x emissions from Newton Unit 1.

If you have any questions regarding this permit, please contact the CAAPP Unit at 217-785-1705.

Raymond E. Pilapil
Manager, Permits Section
Division of Air Pollution Control



For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: ☐ New ☒ Revised ☐ for ARP permit renewal

Identify the facility name,
State, and plant (ORIS)
code.

Facility (Source) Name	Newton	State	Illinois	Plant Code	6017
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Enter the unit ID#
for every affected
unit at the affected
source in column "a."

[illegible]

Facility (Source) Name (from STEP 1)	Newton
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Permit Requirements**STEP 3**

Read the standard requirements.

(1) The designated representative of each affected source and each affected unit at the source shall:

(i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;

(2) The owners and operators of each affected source and each affected unit at the source shall:

(i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and

(ii) Have an Acid Rain Permit.

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.

(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:

(i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and

(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:

(i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or

(ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

Facility (Source) Name (from STEP 1)

Newton

Sulfur Dioxide Requirements, Cont'd.

STEP 3, Cont'd.

- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
- (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
- (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission

Page 4

Facility (Source) Name (from STEP 1):	Newton
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of a new certificate of representation changing the designated representative;

STEP 3, Cont'd.

Recordkeeping and Reporting Requirements, Cont'd.

- (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with

Page 5

Facility (Source) Name (from STEP 1):

Newton

any other provision of the Act, including the provisions of title I of the Act relating

STEP 3, Cont'd.

Effect on Other Authorities, Cont'd.

to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;


(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4
Read the
certification
statement,
sign, and date.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	Alan Bogardus	
Signature		Date 10/22/15



United States
Environmental Protection Agency
Acid Rain Program

CMB No. 2050-0258
Approval expires 11/30/2012

Acid Rain NO_x Compliance Plan

For more information, see instructions and refer to 40 CFR 76.9

Page 1

This submission is: ☐ New ☒ Revised

Page 1 of 2

STEP 1

Indicate plant name, State, and Plant code from the current Certificate of Representation covering the facility.

Plant Name	Newton	State	IL	Plant Code	6017
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STEP 2

Identify each affected Group 1 and Group 2 boiler using the unit IDs from the current Certificate of Representation covering the facility. Also indicate the boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom, and select the compliance option for each unit by making an 'X' in the appropriate row and column.

	ID# 1	ID# 2	ID#	ID#	ID#	ID#
	Type T	Type T	Type	Type	Type	Type
(a) Standard annual average emission limitation of 0.56 lb/mmBtu (for Phase I dry bottom wall-fired boilers)						
(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)	X	X				
(c) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)						
(d) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)						
(e) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)						
(f) Standard annual average emission limitation of 0.30 lb/mmBtu (for cyclone boilers)						
(g) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)						
(h) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)						

NOx Compliance - Page 2

STEP 2, cont'd

Newton
Plant Name (From Step 1)

	ID#	ID#	ID#	ID#	ID#	ID#
	Type	Type	Type	Type	Type	Type
(i) NOx Averaging Plan (include NOx Averaging form)						
(j) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)						
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NOx Averaging (check the NOx Averaging Plan box and include NOx Averaging Form)						
(l) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17(a)(2)(i)(C), (a)(2)(i)(D), or (b)(2)						

STEP 3: Identify the first calendar year in which this plan will apply.

January 1, 2016

STEP 4: Read the special provisions and certification, enter the name of the designated representative, sign and date.

Special ProvisionsGeneral This source is subject to the standard requirements in 40 CFR 72.9. These requirements are listed in this source's Acid Rain Permit.**Certification**

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name Alan Bogardus	
Signature <i>Alan Bogardus</i>	Date 10/22/15

EXHIBIT 4

Shealey Prefiled Testimony

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:

AMENDMENTS TO 35 ILL. ADM.
CODE PARTS 201, 202, AND 212

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R2023-018
(Rulemaking – Air)

PREFILED TESTIMONY OF SHARENE SHEALEY

Introduction

1. My name is Sharene Shealey, and I am presenting testimony in this matter on behalf of Midwest Generation, LLC (Midwest Generation). I am a Director, Environmental, for Midwest Generation's parent company, NRG Energy. As part of my duties, I am responsible for permitting and regulatory development and compliance for air, water, and waste issues at Midwest Generation's generating stations.

2. Midwest Generation proposes a narrowly tailored addition to the Illinois Environmental Protection Agency's (IEPA) proposed rule revision (the Proposed Rule) to provide an alternative averaging period for demonstrating compliance during times of startup, malfunction and breakdown of the coal-fired boilers at Midwest Generation's Powerton Generating Station, I.D. No. 179801AAA ("Powerton"), located at 13082 East Manito Road, Pekin, IL (Tazewell County). Absent narrowly tailored relief, Midwest Generation could not support IEPA's Proposed Rule.

Overview of Powerton Coal-Fired Boilers

3. Powerton has four coal-fired boilers, supplying steam to two electrical generators. Boilers 51 and 52 serve one generator (Unit 5), and boilers 61 and 62 power the other generator (Unit 6). In my testimony, I will refer to all four boilers as the "Affected Boilers."

4. The Affected Boilers were built in the mid 1970s, have nominal capacities of 4,116 mmBtu/hr each, and are served by a single shared stack. Opacity from the stack is monitored by a continuous opacity monitoring system (COMS). In addition to burning coal, the Affected Boilers have the capability to fire natural gas as an auxiliary fuel during startup and shutdown, and for flame stabilization.

5. Midwest Generation operates the Affected Boilers pursuant to the terms of a Clean Air Act Permit Program (CAAPP) Permit (Application No. 95090074) (**Exhibit A**). The permit had an Initial Effective Date of October 15, 2015, and an Expiration Date of October 15, 2020. Midwest Generation timely submitted a renewal permit application, dated January 13, 2020, and received a completeness letter, dated January 15, 2020. Midwest Generation continues to operate Powerton as allowed by Condition 9.14 of its CAAPP permit and Sections 39.5(5)(h) and (n) of the Illinois Environmental Protection Act. Midwest Generation plans to cease operation on or before January 1, 2030, in accordance with the Climate and Equitable Jobs Act, commonly known as CEJA.

6. The Affected Boilers utilize various air pollution control equipment and measures. Particulate matter (PM) emissions are controlled by electrostatic precipitators (ESPs), with separate ESPs for each Affected Boiler. Each Affected Boiler currently burns low-sulfur Powder River Basin coal as its primary fuel, which serves to reduce sulfur dioxide (SO₂) emissions. Dry sorbent injection (DSI) into the duct work at a points prior to the ESPs is also used for SO₂ emission control. Nitrogen oxide emissions are controlled by overfire air systems, rich reagent injection systems, and selective non-catalytic reduction systems. Finally, mercury emissions are controlled by activated carbon injection into the flue gas prior to the ESPs.

Applicable Opacity Standards and Exceptions

7. CAAPP Permit Cond. 7.1.4(a) provides that the Affected Boilers are subject to “the standard in Condition 5.2.2(b) [35 IAC 212.123].” Condition 5.2.2(b) provides in relevant part: “No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent . . . pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.” Compliance with the 30% standard of Section 212.123(a) is determined based on “average opacity calculated from 6-minute periods” of COMS opacity data (CAAPP Permit Cond. 7.1.12(a)).

8. Section 212.123(b) provides an alternative standard, commonly known as the “8-minute provision.” Section 212.124, turn, is titled “Exceptions” and provides various exceptions to the opacity standards in Section 212.123. The first of the exceptions relates to startup, malfunctions and breakdowns (SMB). It states, “Sections 212.122 and 212.123 of this Section shall apply during times of startup, malfunction and breakdown except as provided in the operating permit granted in accordance with 35 Ill. Adm. Code 201” (Section 212.124(a) (emphasis added)). Midwest Generation has understood and interpreted this to mean that, to the extent provided by the Powerton CAAPP Permit, Section 212.123 does not apply to the Affected Boilers during times of startup, malfunction or breakdown.

9. Conditions 7.1.3(b) of the Powerton CAAPP Permit provides an exception to the opacity standards, and certain other emissions standards, during startups, as follows:

Subject to the following terms and conditions, the Permittee is authorized to operate an affected boiler in violation of the applicable standards in Condition 7.1.4(a) (35 IAC 212.123) . . . during startup. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally describing the efforts that will be used “...to minimize startup emissions, duration of individual startups and frequency of startups.”

This condition proceeds to outline permit-specific terms that apply in order to utilize the

exception. Midwest Generation must use “all reasonable efforts ... to minimize startup emissions, duration of individual startups and frequency of startups” (Cond. 7.1.3(b)(i)). It must conduct startups “in accordance with written procedures ... specifically developed to minimize emissions from startups” including “[u]se of auxiliary fuel burners to heat the boiler prior to initiating burning of coal” and “[t]imely energization of the electrostatic precipitator as soon as this may be safely accomplished without damage or risk to personnel or equipment” (Cond. 7.1.3(b)(ii)). Midwest Generation must also comply with certain recordkeeping and reporting requirements (Cond. 7.1.3(c)(iii)). Finally, Condition 7.1.3(b)(iv) references 35 IAC 201.265, stating that authorization for “excess emissions” is not a shield, but a prima facie defense, to enforcement actions, “provided that the Permittee has fully complied with all terms and conditions connected with such authorization.”

10. Condition 7.1.3(c) sets forth the exception from the opacity standards, and certain emission standards, during malfunctions and breakdowns, as follows:

Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected boiler in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123) ... in the event of a malfunction or breakdown of an affected boiler, including the coal crusher, the ash removal system, or the electrostatic precipitator. This authorization is provided pursuant to 35 IAC 201.149, 201.261, and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment...

The condition then outlines the terms that apply in order to utilize the exception. Condition 7.1.3(c)(i) specifies that the “authorization only allows such continued operation as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment.” I want to emphasize that, to lose authorization to operate in a manner necessary to provide “essential service” or “to prevent injury to personnel or severe damage to equipment,” could result in a

critical risk to the grid, to our workers, and to our equipment.

11. The other terms and conditions in order to rely upon the exception in Condition 7.1.3(c) require: “[u]pon the occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable reduce boiler load, repair the affected boiler, remove the affected boiler from service or undertake other action so that excess emissions cease” (Cond. 7.1.3(c)(ii)); complying with certain recordkeeping and reporting obligations (Cond. 7.1.3(c)(iii)); complying with any “reasonable directives” from IEPA following notification of “malfunction or breakdown with excess emissions ... pursuant to 35 IAC 201.263” (Cond. 7.1.3(c)(iv)); and requiring Midwest Generation to “minimize excess emissions during malfunction or breakdown” (Cond. 7.1.3(c)(v)). As with Condition 7.1.3(b), Condition 7.1.3(c) also references 35 IAC 201.265.

12. Condition 8.1 of the CAAPP Permit states the Midwest Generation has been granted a permit shield. It then explains what that means, as follows:

This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date of the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA ... has determined that other requirements specifically identified are not applicable to this source...

(emphasis added). As I explained above, the opacity standards of Section 212.123 are set forth in detail in the CAAPP permit. This means that, so long as Midwest Generation complies the CAAPP permit requirements relating to Section 212.123 (including the related SMB authorizations), compliance with the permit “shall be deemed compliance with” the law.

13. The Permit authorizes Midwest Generation to operate the Affected Boilers with opacity in excess of the opacity limitations in Section 212.123 during times of startup, malfunction and breakdown, provided that Midwest Generation complies with the enumerated requirements in

Conditions 7.1.3(b) and (c) for startups and for malfunctions and breakdowns, respectively. The permit further provides that compliance with the relevant permit conditions (including the authorizations in Conditions 7.1.3(b) and (c)) “shall be deemed compliance with” Section 212.123. As such, these authorizations effectively provide an exception during SMB events, as contemplated by Section 212.124(a).

14. Midwest Generation understands that the exception does not eliminate the possibility of an enforcement action, but that compliance with the terms and conditions of Conditions 7.1.3(b) and (c), as applicable, would constitute a prima facie defense to any such enforcement action. Midwest Generation never understood the permit to prohibit operating with excess opacity to the extent such operation was “authorized” by Condition 7.1.3(b) or (c). And, because Condition 8.1 states that compliance with the permit conditions (authorizing operation with excess opacity, as described above) “shall be deemed compliance with applicable requirements,” Midwest Generation has never believed such operation could constitute non-compliance.

Midwest Generation’s Proposal

15. Midwest Generation proposes to codify a narrower version of the current SMB authorization for the Affected Boilers because it is infeasible for the company to comply with the opacity standards 100% of the time during periods of SMB. Midwest Generation is not seeking this relief for other emission standards applicable to the Affected Boilers, or for other emission units at Powerton or its other Illinois facilities.

16. Under Midwest Generation’s proposal, when compliance of the Affected Boilers cannot be demonstrated with the 30% standard in Section 212.123(a) on a six-minute average basis during times of startup, malfunction or breakdown, Midwest Generation would have the option to

demonstrate compliance using a three-hour averaging period (the Alternative Averaging Period). This would be accomplished for a given six-minute block period when the Alternative Averaging Period is needed by taking the average opacity measurements from the COMS for those six minutes and the preceding 174 minutes of data. This Alternative Averaging Period is modeled on the Affected Boilers' compliance assurance monitoring (CAM) plan for the applicable state PM limitation (35 IAC 212.203) (**Exhibit A** at 104, Table 7.1.13a), which utilizes three-hour opacity data as an indicator of compliance with the PM limitation. The proposal includes recordkeeping and reporting obligations and work practice requirements that are more stringent than required by existing Illinois regulations. And the proposal would not affect any additional permit-specific terms that IEPA established as a condition for utilizing the current SMB exceptions. Adoption of this proposal would not require any change to the revisions proposed by IEPA's Proposed Rule.

17. The proposal would be codified as a new subsection to Section 212.124, as follows:

Section 212.124 Exceptions

d) During times of startup of coal-fired boiler 51, 52, 61 or 62 at the Powerton Generating Station, or of malfunction or breakdown of these boilers or the air pollution control equipment serving these boilers, when average opacity exceeds 30 percent for a six-minute period, as applicable pursuant to Section 212.123(a) of this Subpart, compliance with Section 212.123(a) may alternatively be demonstrated for that six-minute period as follows.

1) Alternative Averaging Period.

Compliance for that six-minute period may be determined based on a three-hour average of opacity, utilizing opacity readings for those six minutes and the immediately preceding 174 minutes.

2) Recordkeeping and Reporting

A) Any person relying on the Alternative Averaging Period in Section 212.124(d)(1) of this Subpart shall maintain records of such average opacity calculations and shall report such calculations to Illinois EPA as part of the next quarterly excess emissions report for the source.

B) For periods of startup, such report shall include:

- 1) The date, time, and duration of the startup.
- 2) A description of the startup.
- 3) The reason(s) for the startup.
- 4) An indication of whether or not written startup procedures were followed. If any written startup procedures were not followed, the report shall include any departures from established procedures and any reason the procedures could not be followed.
- 5) A description of any actions taken to minimize the magnitude or duration of opacity that requires utilization of the Alternative Averaging Period in Section 212.124(d)(1) of this Subpart.
- 6) An explanation whether similar incidents could be prevented in the future and, if so, a description of the actions taken or to be taken to prevent similar incidents in the future.
- 7) Confirmation of fulfillment of the requirements of Section 212.124(d)(3) of this Subpart.

C) For periods of malfunction and breakdown, such report shall include:

- 1) The date, time, duration (i.e., the length of time during which operation continued with opacity in excess of 30 percent, as applicable, on a six-minute average basis) until corrective actions were taken or the boiler was taken out of service.
- 2) A description of the incident.
- 3) Any corrective actions used to reduce the magnitude or duration of opacity that requires utilization of the Alternative Averaging Period in Section 212.124(d)(1) of this Subpart.
- 4) Confirmation of fulfillment of the requirements of Sections 212.124(d)(2)(D) and (d)(3) of this Subpart.

D) Any person who causes or allows the continued operation of a coal-fired boiler during a malfunction or breakdown of the coal-fired boiler or related air pollution control equipment when such continued operation would require reliance on the Alternative Averaging Period in Section 212.124(d)(1) of this

Subpart to demonstrate compliance with Section 212.123 of this Subpart, as applicable, shall immediately report such incident to the Agency by telephone, facsimile, electronic mail, or such other method as constitutes the fastest available alternative, except if otherwise provided in the operating permit. Thereafter, any such person shall comply with all reasonable directives of the Agency with respect to the incident.

3) Work Practices

Any person relying on the Alternative Averaging Period in Section 212.124(d)(1) of this Subpart must comply with the following Work Practices.

- A) Operate the coal-fired boiler and related air pollution control equipment in a manner consistent with good engineering practice for minimizing opacity during such startup, malfunction or breakdown.
- B) Use good engineering practices and best efforts to minimize the frequency and duration of operation in startup, malfunction and breakdown.

18. Under Midwest Generation's proposal, an opacity limit would apply during periods of SMB, in addition to recordkeeping, reporting and work practice requirements. The proposal is more stringent than the current authorizations in the Powerton CAAPP Permit. As a result, it would result in no additional opacity, and no additional emissions of PM or any other pollutant, and would not result in backsliding with respect to any National Ambient Air Quality Standard (NAAQS). Notably, the Alternative Averaging Period is modeled on the Affected Boilers' CAM plan for the applicable state PM limitation. The CAM plan utilizes three-hour opacity data as an indicator of compliance with the PM limitation, specifically stating, "Opacity less than 30 percent averaged over a rolling 3-hour period is an indicator of proper ESP operation and provides reasonable assurance of meeting the 0.1 lb/mmBtu PM limit" (**Exhibit A** at 104, Table 7.1.13a).

19. Midwest Generation crafted the proposal to satisfy U.S. EPA's guidance, as set forth in the SSM SIP Call (80 Fed. Reg. 33840), and to dovetail with IEPA's proposal. Midwest Generation believes its proposal is necessary and appropriate, and should be approved into the

Illinois SIP.

Conclusion

20. Midwest Generation's proposal would provide narrowly crafted relief from the opacity standards to allow Midwest Generation to continue compliant operation of the Affected Boilers during periods of startup, malfunction and breakdown. The proposal includes an opacity limit that would apply during such periods, and so is more stringent than the SMB provisions in the Powerton CAAPP Permit. It would not result in any greater opacity—or any emissions—than currently authorized. As such, it will not result in backsliding. Midwest Generation believes its proposal, once codified in Illinois law, could and should be approved into the Illinois SIP.

EXHIBIT A



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

JB PRITZKER, GOVERNOR

JOHN J. KIM, DIRECTOR

217/785-1705

"REVISED" CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

*Received 12-27-19
at 6:28am D&G*

PERMITTEE

Midwest Generation, LLC
Attn: Dale Green
13082 East Manito Road
Pekin, Illinois 61554-8587

Application No.: 95090074

I.D. No.: 179801AAA

Operation of: Powerton Generating Station

Original Date Received: September 07, 1995

Original Date Issued: September 29, 2005

Initial Effective Date: October 15, 2015¹

Expiration Date: October 15, 2020

Source Location: 13082 East Manito Road, Pekin, Tazewell County, 61554-8587

Responsible Official: Dale Green/Station Director

Alternate Responsible Official: Frank Ameo/Senior General Manager

Permit Authorization:

This permit is hereby granted to the above-designated Permittee for operation of the above-referenced source. This permit is subject to the conditions contained herein.

Type of Permit Revision: Significant and Minor Modifications

Date Revision Received: August 05, 2019

Date Revised Permit Issued: December 20, 2019

This permit authorization has been provided for the revisions of the CAAPP permit that have been made by the procedures for significant modifications of CAAPP permits at Section 39.5(14)(c) of the Illinois Environmental Protection Act and procedures for minor modifications of CAAPP permits at Section 39.5(14)(a) of the Act. The significant modifications involve changes to Condition 7.6.6 regarding frequency of periodic tune-ups of Auxiliary Boiler BLR1 and changes to Condition 7.6.7 regarding notification to the Illinois EPA prior to opacity observations of Auxiliary Boiler BLR1. The minor modifications involve changes to conditions requiring submittal of copies of records and reports required by the CAAPP permit to the Illinois EPA Regional office in Peoria and updates to the permit due to conditions now being obsolete or no longer being "State-Only" requirements. Details regarding all planned changes can be found in the Statement of Basis that accompanied the draft CAAPP Permit.

If you have any questions concerning this permit, please contact the CAAPP Unit at 217/785-1705 (217/782-9143 TDD).

Raymond E. Pilapil MTR 12/20/19

Raymond E. Pilapil
Manager, Permit Section
Bureau of Air

REP:MTR:DLR:tan

cc: Illinois EPA, Permit Section

¹ Except as addressed in Condition 8.7 of this permit.

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1.0 INTRODUCTION

1.1 Source Identification

Powerton Generating Station
13082 East Manito Road
Pekin, Illinois 61554-8587
309/477-5289

I.D. No.: 179801AAA
Acid Rain Permit ORIS Code No.: 879

Standard Industrial Classification: 4911, Electrical Services

1.2 Owner/Parent Company

Midwest Generation, LLC
13082 East Manito Road
Pekin, Illinois 61554-8587

1.3 Operator

Midwest Generation, LLC
13082 East Manito Road
Pekin, Illinois 61554-8587

Sharene Shealey/Environmental Contact
724-255-3220

1.4 General Source Description

The Permittee operates four coal-fired boilers (twin boilers per electrical generating unit) with associated steam turbine (one turbine per unit) to produce electricity. The boilers may also be fired with natural gas during startup, boiler flame stabilization and shutdown periods.

1.5 Title I Conditions

This CAAPP permit contains certain conditions for units at this source that address the applicability of permitting programs for the construction and modification of sources, which programs were established pursuant to Title I of the Clean Air Act (CAA) and regulations thereunder. These programs include 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification (MSSCAM), and are implemented by the Illinois EPA pursuant to Sections 9, 9.1, 39(a) and 39.5(7)(a) of Illinois' Environmental Protection Act (Act). These "Title I conditions" within this permit are specifically designated as "T1", if they reflect requirements established in construction permits issued for this source, "T1R" if they revise requirements established in such construction permits, or "T1N" if they are newly established in this CAAPP permit. These conditions continue in effect,

notwithstanding the expiration date specified on the first page of this permit, as their authority derives from Titles I and V of the CAA, as well as Titles II and X of the Act. (See also Condition 8.7.)

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

acfm	actual cubic feet per minute
ACI	Activated Carbon Injection
ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
BART	Best Available Retrofit Technology
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAIR	Clean Air Interstate Rule
CAM	Compliance Assurance Monitoring (40 CFR Part 64)
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CMS	Continuous Monitoring System(s)
CSAPR	Cross State Air Pollution Rule
dcfm	dry cubic feet per minute
DSI	Dry Sorbent Injection
EGU	Electrical Generating Unit(s)
ERMS	Emissions Reduction Market System (35 IAC Part 205)
ESP	Electrostatic Precipitator
°F	degrees Fahrenheit
FGC	Flue Gas Conditioning
FGD	Flue Gas Desulfurization
FGR	Flue Gas Recirculation
ft	foot
ft ³	cubic foot
Gal	Gallon
GWh	Gigawatt hour (1,000,000,000 Wh)
HAP	Hazardous Air Pollutant
HP	horsepower
Hr or hr	Hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
°K	degrees Kelvin
Kg	kilogram
kW	Kilowatts
LEE	Low Emitting EGU
Lb or lb	Pound
LNB	Low NO _x Burners
m	meter
MACT	Maximum Achievable Control Technology
MATS	Mercury and Air Toxics Standard (40 CFR 63 Subpart UUUUU)
mmBtu	million British thermal units

MW	Megawatts
MWh	Megawatt hour
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards (40 CFR Part 60)
NSSA	New Source Set-Aside
ORIS	Office of Regulatory Information System
OFA	Over-Fire Air
OM	organic material
PM	Particulate Matter
PM CPMS	Particulate Matter Continuous Parametric Monitoring System
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
PM _{2.5}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration (40 CFR 52.21)
psia	pounds per square inch absolute
RATA	Relative Accuracy Test Audit
RMP	Risk Management Plan
RRI	Rich Reagent Injection
SNCR	Selective Non-Catalytic Reduction
SO ₂	Sulfur Dioxide
STMS	Sorbent Trap Monitoring System(s)
T	ton (2000 pounds)
TBtu	Trillion British thermal units (1,000,000,000,000 Btu)
TR	Transport Rule
Tl	Title I - identifies Title I conditions that have been carried over from an existing permit
TlN	Title I New - identifies Title I conditions that are being established in this permit
TlR	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
Trona	A mineral form of sodium carbonate and sodium bicarbonate
USEPA	United States Environmental Protection Agency
VOC or VOM	volatile organic compounds or volatile organic material
VOL	volatile organic liquid
Yr or yr	year

3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

- 3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

None

- 3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a) (2) or (a)(3), as follows:

Sulfuric Acid Storage Tanks
Sodium Hypochlorite Storage Tanks
Ammonium Hydroxide Storage Tanks
Urea Solution Storage Tanks
ACI Silos with Bin Vents and Delivery Systems
Refined Coal Liquid Additive Storage Tank

- 3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a) (4) through (19), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a) (4)].

Equipment used for filling drums, pails, or other packaging containers, excluding aerosol cans, with soaps, detergents, surfactants, lubricating oils, waxes, vegetable oils, greases, animal fats, glycerin, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210 (a) (8)].

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons provided the tank is not used for the storage of any amount of gasoline,

including gasoline/ethanol blend fuels, or any amount of material or mixture of any material listed as a hazardous air pollutant pursuant to section 112(b) of the Clean Air Act. [35 IAC 201.210(a)(10)(A)]

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1,118 kW (150 and 1,500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a)(16)].

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed With such materials [35 IAC 201.210(a)(17)].

Loading and unloading systems for railcars, tank trucks, or watercraft that handle only the following liquid materials, provided an organic solvent has not been mixed with such materials: soaps, detergents, surfactants, lubricating oils, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(18)].

Fuel dispensing operations and fuel dispensing equipment for distillate oil (including kerosene and diesel fuel), biodiesel, and biodiesel/distillate oil blends, for mobile sources, including on-road and off-road vehicles, for use in those mobile sources. For purposes of 35 IAC 201.210(a)(19), fuel dispensing equipment means equipment for transferring fuel to a mobile source, including nozzles, hoses, swivels, breakaways, hose retractors, vapor valves, dispensers, vacuum-assist devices, vapor-return piping, and liquid collection points. Storage tanks and storage tank equipment are not included in fuel dispensing operations or fuel dispensing equipment and are addressed separately. [35 IAC 201.210(a)(19)(B)]

3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

Note: The heating of a coal-fired boiler with auxiliary fuel during maintenance and repair of the boiler is

considered an insignificant activity under 35 IAC 201.210(b) (29) and is generally not addressed by the unit-specific conditions of this permit for coal fired boilers. Notwithstanding such status as an insignificant activity, the opacity of the exhaust from each coal fired boiler is at all times subject to the applicable opacity standard and the unit-specific conditions of this permit for boilers that relate to opacity are applicable during maintenance and repair of a boiler.

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182.
- 3.2.2 For each particulate matter process emission unit, other than units excluded by 35 IAC 212.323 or 212.681, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.
- 3.2.4 Pursuant to Permit 07060012 at all times, the Permittee shall to the extent practicable, maintain and operate the emission units for storage and handling of activated carbon for the activated carbon injection (ACI) systems for the coal-fired boilers in a manner consistent with good air pollution control practice for minimizing emissions. [T1]
- 3.2.5 Pursuant to Permit 10030003, at all times, the Permittee shall, to the extent practicable, maintain and operate reagent storage and handling operations for the rich reagent injection (RRI) and selective non-catalytic reduction (SNCR) systems for the coal-fired boilers in a

manner consistent with good air pollution control practices for minimizing emissions. [T1]

3.2.6 Pursuant to 39.5(7) (b) and (d) of the Act, the Permittee shall keep a record of the good air pollution control practices for the ACI, RRI and SNCR systems. These good air pollution control practices may be manufacturers' recommendations for operating and maintenance.

3.3 Addition of Insignificant Activities

3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).

3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12) (b) of the Act.

3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

3.4 Emergency Generator Diesel Engines

3.4.1 Description

Two emergency diesel engines have been installed to power the emergency generators on an emergency basis during interruptions or outages of normal power supply. In addition to emergency purposes, the engines are operated for maintenance and readiness checks.

Two additional diesel engines supply power to fire pumps.

Note: The description in Condition 3.4.1 is for informational purposes only and implies no limits or constraints.

3.4.2 List of Emission Units

The "affected engines" for the purpose of these unit specific conditions are as follows:

Emission Unit	Description	Year Installed
Unit 5 Emergency Diesel Generator (IC3)	839 Hp Compression Ignition Engine	2011
Unit 6 Emergency Diesel Generator (IC4)	738 Hp Compression Ignition Engine	1972
Unit 5 Diesel Fire Pump (IC1)	266 Hp Compression Ignition Engine	1993
Unit 6 Diesel Fire Pump (IC2)	550 Hp Compression Ignition Engine	1983

3.4.3 Applicable Federal Emission Standards

- a. Pursuant to 40 CFR 63.6585, the affected engines are subject to the applicable requirement in 40 CFR 63 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE).
- b. Pursuant to 40 CFR 63.6590(a), under 40 CFR '63 Subpart ZZZZ, affected engine IC3 is a new stationary RICE and affected engines IC4, IC1 and IC2 are existing stationary RICEs.
- c. Pursuant to 40 CFR 63.6640(f), the Permittee must operate the affected engines according to the requirements in 40 CFR 63.6640(f) (1) through (4) in order for the engines to be considered an emergency stationary RICE under 40 CFR 64 Subpart ZZZZ.
- d. Pursuant to 40 CFR 63.6602, affected engine IC1 must comply with the applicable requirements in Table 2c to 40 CFR 63 Subpart ZZZZ.
- e. Pursuant to 40 CFR 63.6625(f), the Permittee must install a non-resettable hour on affected engine IC1.
- f. Pursuant to 40 CFR 63.6625(e), the Permittee must maintain and operate affected engine IC1 in accordance with manufactures instructions.
- g. Pursuant to 40 CFR 60.4200(a) (1), affected engine IC3 is subject to the applicable requirements in 40 CFR 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.
- h. Pursuant to 40 CFR 60.4205(b), affected engine IC3 must comply with the emission standards for new

nonroad CI engines in 40 CFR 60.4202, for all pollutants.

- i. Pursuant to 40 CFR 60.4207(a) for affected engine IC3, the Permittee must use diesel fuel that meets the requirements of 40 CFR 80.510(a).
- j. Pursuant to 40 CFR 60.4209(a), the Permittee must install a non-resettable hour meter on affected engine IC3.
- k. Pursuant to 40 CFR 60.4211(a), the Permittee must operate and maintain affected engine IC3 according to manufactures instructions.
- l. Pursuant to 40 CFR 60.4211(c), the Permittee must have purchased affected engine IC3 certified to the applicable emission standards in 40 CFR 60.4205(b).
- m. Pursuant to 40 CFR 60.4211(f), the Permittee must operate affected engine IC3 according to the requirements in 40 CFR 60.4211(f) (1) through (3) in order for the engine to be considered an emergency engine.

3.4.4 Applicable State Emission Standards

- a. i. The standard that addresses the opacity of the emission of smoke or other particulate matter from the affected engines is set forth in Condition 5.2.2(b), except as provided by 35 IAC 212.124(a).
- b. i. The emission of sulfur dioxide (SO₂) into the atmosphere from the affected engines shall not exceed 2,000 ppm pursuant to 35 IAC 214.301.
 - ii. Pursuant to 35 IAC 214.305, the sulfur content of all distillate fuel oil used by an affected engine shall not exceed 15 ppm.

3.4.5 Non-Applicability Provisions

- a. The affected engines are not subject to the requirements of the federal Acid Rain Program because they are not utility units. (Refer to 40 CFR 72.2 and 72.6.) Accordingly, electricity generated by the affected engines may not be sold to the power grid on a commercial basis.
- b. The affected engines are not subject to the requirements of 35 IAC Part 212, Subpart L, because a process weight rate cannot be set, due to the

nature of such unit, so that these rules cannot reasonably be applied, pursuant to 35 IAC 212.323.

- c. Pursuant to 40 CFR 63.6600(c), affected engines IC4 and IC2 are not subject to the emission limitations in Tables 1a, 2a, 2c and 2d to 40 CFR 63 Subpart ZZZZ or the operating limitations in Table 1b and 2b to 40 CFR 63 Subpart ZZZZ because these engines are emergency stationary RICEs with site rating greater than 500 brake HP.

3.4.6 Opacity and Visible Emissions Observations

Pursuant to Sections 39.5(7) (b) and (d) of the Act,

- a. The Permittee shall perform observations for opacity in accordance with Reference Method 22 for visible emissions at least once every calendar year. If visible emissions are observed, the Permittee shall take corrective action within 4 hours of such observation. Corrective action may include, but is not limited to, shut down of the generator and/or maintenance and repair. If corrective action was taken the Permittee shall perform a follow-up observation for visible emissions in accordance with Reference Method 22. If visible emissions continue, then measurements of opacity in accordance with Reference Method 9, for a minimum of 30 minutes, shall be conducted within 7 days in accordance with Condition 8.5.
- b. Upon written request by the Illinois EPA, the Permittee shall have the opacity of the exhaust from the affected engines during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below. These observations shall be conducted within 45 calendar days of the date of the request, or on the date the affected engines next operate, or by the date agreed upon by the Illinois EPA, whichever is latest.
- c. i. The Permittee shall notify the Illinois EPA at least 7 days in advance of the date and time of any Reference Method 9 testing, in order to allow the Illinois EPA to witness testing. This notification shall include the name and employer of the observer(s) and identify any concerns for successful completion of observations, i.e., lack of suitable point for proper observation or inability to conduct observations under specified operating conditions.

- ii. The Permittee shall promptly notify the Illinois EPA of any changes in the date or time of testing.
- d. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of testing, if Illinois EPA personnel are present.
- e. The Permittee shall submit a written report for these observations within 15 days of the date of observation. This report shall include:
 - i. Date and time of testing.
 - ii. Name and employer of qualified observer.
 - iii. Copy of current certification.
 - iv. Description of observation conditions.
 - v. Description of engine operating conditions.
 - vi. Raw data.
 - vii. Opacity determinations.
 - viii. Conclusions.

3.4.7 Emission Testing Requirements

Within 180 days of a written request from the Illinois EPA, or the date agreed upon by the Illinois EPA, whichever is later, the Permittee shall have tests conducted for the affected engines for emissions of NO_x, and CO by an approved independent testing service. These tests shall be conducted in accordance with the requirements in 40 CFR 60.4212.

3.4.8 Recordkeeping Requirements

- a. For each affected engine, the Permittee shall fulfill applicable recordkeeping requirements of the applicable NESHAP and NSPS.
- b. Pursuant to Section 39.5(7) of the Act, for each affected engine, the Permittee shall maintain the following records:
 - i. Maintenance and repair records, listing each activity performed with date.
 - ii. Records demonstrating that the fuel used complies with the requirements in Condition 3.4.4(b)(ii), such as copies of delivery

records from the fuel supplier indicating the sulfur content of the fuel.

- iii. Records of the operating hours or fuel usage of the affected engines (engine-hours/month and engine-hours/year or gallons oil/month and gallons oil/year) with date, time, duration, and purpose (i.e., exercise or emergency need), in accordance with 40 CFR 60.4214(b).
- iv. Records for opacity observations made in accordance with Reference Method 9 for the affected engine that it conducts or that are conducted on its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the identity of the observer, a description of the various observations that were made, the observed opacity, and copies of the raw data sheets for the observations.
- c. Pursuant to 35 IAC 214.305, the Permittee shall maintain records demonstrating that the fuel oil used by the engine(s) complies with the requirements in Condition 3.4.4(b)(ii), such as records from the fuel supplier indicating the sulfur content of the fuel oil.

3.4.9 Reporting Requirements

- a. For each affected engine, the Permittee shall fulfill applicable notification and reporting requirements of the NSPS, including 40 CFR 60.4214 and 60.7.
- b. For each affected engine, the Permittee shall fulfill applicable notification and reporting requirements of the NESHAP, including 40 CFR 63.6645 (f).
- c. Pursuant to Section 39.5(7) of the Act,
 - i. If there is a deviation from the requirements for the affected engines, the Permittee shall report the deviation with the periodic compliance report for the affected engines.
 - ii. The Permittee shall notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in Conditions 3.4.4(b)(ii) or 3.4.8(c). Such notification shall include a description of the deviations, a discussion of the possible cause of the

deviations, any corrective actions taken, and any preventative measures taken.

4.0 EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Emission Control Equipment/Measures	Ref. *
Insignificant Activities (Activities addressed in Section 3)			
Unit 5 Boiler BLR 51	Babcock and Wilcox (1973)	OFA, RRI, SNCR, DSI, ACI and ESP	7.1
Unit 5 Boiler BLR 52	Babcock and Wilcox (1973)	OFA, RRI, SNCR, DSI, ACI and ESP	
Unit 6 Boiler BLR 61	Babcock and Wilcox (1976)	OFA, RRI, SNCR, DSI, ACI and ESP	
Unit 6 Boiler BLR 62	Babcock and Wilcox (1976)	OFA, RRI, SNCR, DSI, ACI and ESP	
Coal Handling Equipment	Coal Receiving Operations, Coal Storage Operations, Coal Transfer Operations, and Dust Collection Devices	Enclosures, Covers, Dust Suppression, and Dust Collection Devices	7.2
Crusher House	Coal Crushing Operation	Enclosures, Covers, Dust Suppression, and Dust Collection Devices	7.3
Fly Ash Equipment	Transfer Systems, Storage Silo, and Loadout Operations	Enclosures and Dust Collection Devices	7.4
Tank TKF4	Gasoline Storage Tank 1000 Gallon	Submerged Loading Pipe	7.5
Auxiliary Boiler BLR1	Natural Gas Fired Boiler (1976)	None	7.6
Dry Sorbent Injection Handling Facilities	Receiving, Transfer, Storage and Milling of Sorbent for the DSI Systems	Bin Vent Filters and Enclosures	7.7
Auxiliary Boiler 2	Transportable Natural Gas Fired Boiler	Low-NOx Burners	7.8
LPG Heaters	Portable Direct Fired Space Heaters	None	7.9
Coal Additive Handling Facility**	Receiving, Transfer, Storage of Dry Additive and Mixers to Make the Coal Supply for the Boilers into Refined Coal	Bin Vent Filters and Enclosures	7.10
Note: The information and descriptions contained in this table are for informational purposes only and imply no limits or constraints.			

* Reference to the Unit Specific Conditions in Section 7 of this permit.

** As of the date of issuance of this revised permit, the coal additive
handling facility has not begun operation.

5.0 OVERALL SOURCE CONDITIONS

5.1 Applicability of Clean Air Act Permit Program (CAAPP)

- 5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of SO₂, CO, NO_x, VOM, PM, and HAP emissions.
- 5.1.2 This permit is issued based on the source requiring a CAAPP permit as an "affected source" for the purposes of Acid Deposition Control, Title IV of the Clean Air Act.

5.2 Applicable Regulations and Source-Wide Requirements

- 5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.
- 5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:
 - a. i. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith (i.e., overhead) at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
 - ii. The Permittee shall conduct observations at the property line of the source for visible emissions of fugitive particulate matter from the source to address compliance with 35 IAC 212.301, upon request by the Illinois EPA, as follows: For this purpose, daily observations shall be conducted for a week for particular area(s) of concern at the source, as specified in the request. Observations shall begin either within one day or three days of receipt of a written request from the Illinois EPA, depending, respectively, upon whether observations will be conducted by employees of the Permittee or a third-party observer hired by the Permittee to conduct observations on its behalf. The Permittee shall keep records for these observations, including identity of the observer, the date and time of observations, the location(s) from which observations were made, and duration of any fugitive emissions event(s).
- b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater

than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

- c. Pursuant to Construction Permits 10120020 and 10120021, as related to roadways at the source used by trucks that handle sorbent that is delivered, to the Dry Sorbent Handling Facilities addressed in Section 7.7 of this permit: [T1]
 - i. The transport of dry sorbent shall be on paved roads, which shall be maintained in good condition to control emissions of particulate matter.
- d. Pursuant to Construction Permits 10120020 and 10120021, the transport of fly ash shall be on paved roads, which shall be maintained in good condition to control emissions of particulate matter. [T1]

5.2.3 Certain emission units at the source are subject to the following standards related to control of fugitive particulate matter emissions because the source is located in an area listed in 35 IAC 212.302:

- a. Pursuant to 35 IAC 212.304(a), all storage piles of material shall be protected by a cover or sprayed with a surfactant solution or water on a regular basis, as needed, or treated by an equivalent method in accordance with an operating program for fugitive particulate matter emissions. (Refer to Condition 5.2.4 for the operating program for fugitive particulate matter emissions.)

Note: This rule is applicable because uncontrolled emissions of fugitive particulate matter from all storage piles at the source would be in excess of 50 tons/year, based on information in the application.

- b. Pursuant to 35 IAC 212.305, all conveyor loading operation to storage piles subject to 35 IAC 212.304 (See Condition 5.2.3(a)) shall utilize spray system, telescopic chutes, stone ladders or other equivalent methods in accordance with an operating program for fugitive particulate matter emissions. (Refer to Condition 5.2.4.)
- c. Pursuant to 35 IAC 212.306 and Section 39.5(7) (a) of the Act, all normal traffic pattern access areas surrounding storage piles subject to 35 IAC 212.304 (See Condition 5.2.3(a)) and all normal traffic pattern roads and parking facilities located at this

source shall be paved or treated with water, oils, or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils, or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with an operating program for fugitive particulate matter emissions. (Refer to Condition 5.2.4.)

- d. Pursuant to 35 IAC 212.307, all unloading and transporting of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.
- e. Pursuant to 35 IAC 212.308, crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or surfactant solution, utilize choke-feeding or be treated by an equivalent method, in accordance with an operating program for fugitive particulate matter emissions. (Refer to Condition 5.2.4)
- f. Pursuant to 35 IAC 212.313, if particulate matter collection equipment is operated pursuant to 35 IAC 212.304 through 212.310 (as addressed in Conditions 5.2.3(a) through (e) and 5.2.4(a)), emissions of particulate matter from such equipment shall not exceed 68 mg/dscm (0.03 gr/dscf).

5.2.4 Fugitive Particulate Matter Operating Program

Pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act, the Permittee shall comply with the following applicable requirements. These requirements are applicable to all emission units (including insignificant activities unless specified otherwise in this Section) at the source.

- a. Pursuant to 35 IAC 212.309, this source shall be operated under the provisions of Fugitive PM Operating Program prepared by the Permittee and submitted to the IEPA for its review. The Fugitive PM Operating Program shall be designed to significantly reduce fugitive particulate matter emissions, pursuant to 35 IAC 212.309(a). The Permittee shall comply with the Fugitive PM Operating Program and any amendments to the Fugitive PM Operating Program submitted pursuant to Condition 5.2.4(b). As a minimum, the Fugitive PM Operating Program shall include provisions identified in 35 IAC 212.310(a) through (g).

- b. Pursuant to 35 IAC 212.312, the Fugitive PM Operating Program shall be amended from time to time by the Permittee so that the Fugitive PM Operating Program is current. Such amendments shall be consistent with the requirements set forth by this Condition 5.2.4(a) and shall be submitted to the IEPA within 30 days of such amendment. Any future revision to the Fugitive PM Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the IEPA within 30 days of receipt of the revision. Upon such automatic incorporation, the revised plan replaces the version of the plan previously incorporated by reference.
- c. The Fugitive PM Operating Program, as submitted by the Permittee on May 26, 2017, is incorporated herein by reference. The document constitutes the formal Fugitive PM Operating Program required under 35 IAC 212.310, addressing the control of fugitive particulate matter emissions from all plant roadways, including the storage piles, access areas near storage piles, and other subject operations located at the facility that are subject to 35 IAC 212.309.
- d. Pursuant to Section 39.5(7) (b) of the Act, the Permittee shall keep a copy of the Fugitive PM Operating Program, any amendments or revisions to the Fugitive PM Operating Program (as required by Condition 5.2.4(a)), and the Permittee shall also keep a record of activities completed according to the Fugitive PM Operating Program.

5.2.5 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, including the following:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be appropriately

certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.6 Risk Management Plan (RMP)

Should this stationary source, as defined in 40 CFR 68.3, become subject to the federal rules for Chemical Accident Prevention in 40 CFR Part 68, then the owner or operator shall submit:

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all applicable requirements of 40 CFR Part 68, including the registration and submission of the RMP, as part of the annual compliance certification required by Condition 9.8.

Note: This condition is imposed pursuant to 40 CFR 68.215(a).

5.2.7 Future Emission Standards

- a. Should this source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC Subtitle B after the date issued of this permit, the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance or otherwise demonstrate initial compliance as provided by such regulation. Following the submittal of such a compliance certification or initial compliance demonstration, the Permittee shall address the applicable requirements of such regulation as part of the annual compliance certification required by Condition 9.8.

Note: This permit may also have to be revised or reopened to address such newly applicable regulations, as provided by Section 39.5(15) (a) of the Act. (See Condition 9.12.2.)

- b. This permit and the terms and conditions herein do not affect the Permittee's past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA. Further, neither the issuance of this permit nor any of the terms or conditions of the permit shall alter or affect the liability of the Permittee for any

violation of applicable requirements prior to or at the time of permit issuance.

5.2.8 Episode Action Plan

- a. Pursuant to 35 IAC 244.142, the Permittee shall have on file with the Illinois EPA an approved Episode Action Plan for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.
- b. Pursuant to 415 ILCS 5/39.5(7)(a), the Episode Action Plan, as submitted by the Permittee on December 19, 2018 is incorporated herein by reference. Any revision to the plan submitted to Illinois EPA while this permit is in effect is automatically incorporated by reference, provided the revision is not expressly disapproved, in writing, by the Illinois EPA within 30 days of receipt of the revision. Upon such automatic incorporation, the revised plan replaces the version of the plan previously incorporated by reference.
- c. The plan incorporated by reference into this permit constitutes the approved Episode Action Plan required by 35 IAC 244.141, addressing the actions that will be implemented to reduce SO₂, PM₁₀, NO₂, CO and VOM emissions from various emissions units at the source in the event of a yellow alert, red alert or emergency issued under 35 IAC 244.161 through 244.165.
- d. Pursuant to 35 IAC 244.169, or as may otherwise be required under 35 IAC 244, Appendix D, the Permittee shall immediately implement the appropriate steps described in the approved Episode Action Plan upon receiving notice from the Illinois EPA.
- e. Pursuant to 35 IAC 244.143(d), if an operational change occurs at the source which invalidates the approved Episode Action Plan, a revised Episode Action Plan shall be submitted to the Illinois EPA for review and approval within 30 days of the change.
- f. Pursuant to Section 35 IAC 244.145(b), in the event that the Illinois EPA notifies the Permittee of a deficiency with any Episode Action Plan submitted pursuant to 35 IAC Part 244, the Permittee shall be required to revise and resubmit the Episode Action Plan within 30 days of receipt of notification to address the deficiency.

- g. Pursuant to Section 39.5(7) (b) and (e) of the Act, the, the Permittee shall keep a copy of the approved Episode Action Plan along with a record of activities completed according to the Episode Action Plan.

5.2.9 Control Measures Record

- a.
 - i. The Control Measures Record, as submitted by the Permittee on September 25, 2017 is incorporated herein by reference and constitutes the Control Measures Record required by Conditions 7.2.9(b), 7.3.9(b), and 7.4.9(b).
 - ii. Any revised version of the Control Measures Record prepared by the Permittee and submitted to Illinois EPA while this permit term is in effect is automatically incorporated by reference into this permit, except as provided in Condition 5.2.9(a)(iii). Upon such automatic incorporation, the revised plan replaces the version of the plan previously incorporated by reference.
 - iii. For any revisions to the Control Measures Record that relate to the Rotary Car Dumper, Coal Storage Piles (Active and Inactive), Radial Boom Stacker to Coal Pile, Fly Ash Storage Silos and Loadout (Unit 5 and Unit 6), the Permittee shall submit an appropriate permit application to incorporate by reference such revisions into the permit.
 - iv. In the event that within 30 days of receipt of a revised Control Measures Record the Illinois EPA notifies the Permittee in writing of any deficiency with the revision, then, within 30 days of such notice, the Permittee shall respond with relevant additional information or a further revision to the Control Measures Record.
- b. Pursuant to Section 39.5(7) (b) of the Act, the Permittee shall keep a copy of the Control Measures Record and any amendments or revisions to the Control Measures Record (as required by Conditions 7.2.9, 7.3.9 and 7.4.9.

5.3 General Non-Applicability of Regulations of Concern

5.3.1 Non-Applicability of 35 IAC 212.316

Emissions units at this source are not subject to 35 IAC 212.316 because the source is not located in an area defined in 35 IAC 212.324(a)(1).

Note: Non-applicability of regulations to individual emissions units and groups of units is also addressed in Section 7 of this permit.

5.4 Intentionally Blank

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

Emission limitations are not set for this source for the purpose of permit fees. Rather, the Permittee shall pay the maximum fee required pursuant to Section 39.5(18)(a)(ii)(A) of the Act. (See also Condition 9.4.) (State-Only Requirement)

5.6 General Recordkeeping Requirements

5.6.1 Records for Emissions

The Permittee shall maintain records for the source to prepare its Annual Emission Report pursuant to 35 IAC 254.134.

5.6.2 Retention and Availability of Records

The Permittee shall comply with the following requirements with respect to retention and availability of records pursuant to Sections 4(b) and 39.5(7)(a), (b), (e)(ii), (o)(v), and (p)(ii)(A) and (B) of the Act.

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be readily accessible to the Permittee, the Illinois EPA and USEPA, and made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. In response to an Illinois EPA or USEPA request made during the course of an inspection of the source, the Permittee shall retrieve and provide paper copies, or as electronic media, any records required by this permit that are retained in an electronic format (e.g., computer). Such response shall be provided at the time of the inspection; however, if the Permittee believes that the volume and nature of the requested material would make this overly burdensome, material shall be provided no later than

10 days thereafter unless a later date is agreed upon by the Permittee, Illinois EPA, and/or the USEPA.

- c. Upon written request by the Illinois EPA for copies of records or reports required to be kept by this permit, the Permittee shall promptly submit a copy of such material to the Illinois EPA. For this purpose, material shall be submitted to the Illinois EPA within 30 days unless additional time is provided by the Illinois EPA or the Permittee believes that the volume and nature of requested material would make this overly burdensome, in which case, the Permittee shall respond within 30 days with the explanation and a schedule for submittal of the requested material. (See also Condition 9.12.4.)

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f) (ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

- a. For emissions units that are addressed by the unit-specific conditions of this permit, the timing for reporting of deviations shall be in accordance with such conditions.
- b.
 - i. For other emissions units and activities at the source, the timing for reporting of deviations shall be in accordance with the provisions of relevant regulations if such provisions address timing of deviation reports.
 - ii. Otherwise, if the relevant regulations do not address timing of deviation reports, deviation reports shall be submitted within 30 days.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year, as specified by 35 IAC Part 254 [Sections 4(b) and 39.5(7) (a), (b) and (f) of the Act].

6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS

6.1 Intentionally Blank

6.2 Acid Rain Program

6.2.1 Applicability

Under Title IV of the CAA, Acid Deposition Control, this source is an affected source and the following emission units at the source are affected units for acid deposition:

Boilers 51, 52, 61, and 62

Note: Title IV of the CAA and regulations promulgated thereunder, establish requirements for affected sources related to control of emissions of pollutants that contribute to acid rain. For purposes of this permit, these requirements are referred to as Title IV provisions.

6.2.2 Applicable Emission Requirements

The owners and operators of the source shall not violate applicable Title IV provisions. In particular, NO_x emissions of affected units shall not exceed the limit set by 40 CFR Part 76 as allowed by an Acid Rain Permit. SO₂ emissions of the affected units shall not exceed any allowances that the source lawfully holds under Title IV provisions [Section 39.5(7)(g) and (17)(l) of the Act].

Note: Affected sources must hold SO₂ allowances to account for the SO₂ emissions from affected units at the source that are subject to Title IV provisions. Each allowance is a limited authorization to emit up to one ton of SO₂ emissions during or after a specified calendar year. The possession of allowances does not authorize exceedances of applicable emission standards or violations of ambient air quality standards.

6.2.3 Monitoring, Recordkeeping and Reporting

The owners and operators of the source and, to the extent applicable, their designated representative, shall comply with applicable requirements for monitoring, recordkeeping and reporting specified by Title IV provisions, including 40 CFR Part 75 [Section 39.5(7)(b) and 17(m) of the Act].

Note: As further addressed by Section 7 of this permit, the following emission determination methods are currently being used for the affected units at this source.

NO_x: Continuous Emissions Monitoring (40 CFR 75.12)
SO₂: Continuous Emissions Monitoring (40 CFR 75.11)
Opacity: Continuous Opacity Monitoring (40 CFR 75.14)

6.2.4 Acid Rain Permit

The owners and operators of the source shall comply with the terms and conditions of the source's Acid Rain permit [Section 39.5(17)(1) of the Act].

Note: The source is subject to an Acid Rain permit, which was issued pursuant to Title IV provisions, including Section 39.5(17) of the Act. Affected sources must be operated in compliance with their Acid Rain permits. This source's Acid Rain permit is incorporated by reference into this permit and a copy of the current Acid Rain permit is included as Attachment 5 of this permit. Revisions and modifications of this Acid Rain permit, including administrative amendments and automatic amendments (pursuant to Sections 408(b) and 403(d) of the CAA or regulations thereunder) are governed by Title IV provisions, as provided by Section 39.5(13) (e) of the Act. Accordingly, revision or renewal of the Acid Rain permit may be handled separately from this CAAPP permit and a copy of the new Acid Rain permit may be included in this permit by administrative amendment.

6.2.5 Coordination with Other Requirements

- a. This permit does not contain any conditions that are intended to interfere with or modify the requirements of Title IV provisions (Section 39.5(17) (h) of the Act). In particular, this permit does not restrict the flexibility under Title IV provisions of the owners and operators of this source to amend their Acid Rain compliance plan [Section 39.5(17) (h) of the Act].
- b. Where another applicable requirement of the CAA is more stringent than an applicable requirement of Title IV provisions, both requirements are incorporated into this permit and are enforceable and the owners and operators of the source shall comply with both requirements [Section 39.5(7) (h) of the Act].

6.3 Best Available Retrofit Technology (BART)

6.3.1 Description

Pursuant to Section 169A of the Clean Air Act, USEPA has determined that as part of its strategy to reduce visibility impairing air pollutants, such as nitrogen oxides (NO_x), sulfur dioxide (SO₂) and particulate matter (PM), that certain stationary emission sources should be subject to a Best Available Retrofit Technology (BART) standard. BART is defined as an "emission limitation based on the degree of reduction available through the application of the best system of continuous emission reduction for each pollutant which is emitted by an existing stationary facility" (40 CFR 51.301).

The sources subject to a BART standard, according to "Guidelines for BART Determinations under the Regional Haze Rule" ("BART Guidelines") published by USEPA in July of 2005, must be one of 26 specified source categories; were in existence in August 1977; began operating after August 1962; and have the potential to emit 250 tons per year or more of any air pollutant.

For coal-fired EGUs, the BART Guidelines provide presumptive emission limits or control levels for various boiler and coal types. The Illinois EPA has compared these presumptive BART emission levels to existing emission reduction requirements and commitments for the subject-to-BART EGUs in Illinois.

Note: The description in Condition 6.3.1 is for informational purposes only and implies no limits or constraints.

6.3.2 Applicability

This source is an affected source and the following emission units at the source are affected units for BART:

Boiler 51,
Boiler 52,
Boiler 61, and
Boiler 62.

6.3.3 BART Controls for EGUs/Emission Standards

The Permittee shall comply with the applicable emission reduction requirements that apply to the Powerton EGUs addressed in Condition 6.5 below.

6.4 Cross-State Air Pollution Rule (CSAPR)/Transport Rule (TR)
Trading Programs

6.4.1 Applicability

The USEPA issued the Cross State Air Pollution Rule (CSAPR), also known as the Transport Rule (TR) in July 2011 to address CAA requirements concerning interstate transport of air pollution and to replace the previous Clean Air Interstate Rule (CAIR). For purposes of CSAPR, this source is a "TR NO_x Annual source," "TR NO_x Ozone Season source" and "TR SO₂ Group 1 source." The following emission units at this source are "TR NO_x Annual units," "TR NO_x Ozone Season units" and "TR SO₂ Group 1 units":

Units 5 and 6

- * Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals, 76 FR 48208 (August 8, 2011); Federal Implementation Plans for Iowa, Michigan, Missouri, Oklahoma, and Wisconsin and Determination for Kansas Regarding Interstate Transport of Ozone, 76 FR 80760 (December 27, 2011); Revisions to Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone, 77 FR 10324 (February 21, 2012); Revisions to Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone, 77 FR 34830 (June 12, 2012).

6.4.2 Applicable Emission Requirements

a. TR NO_x Annual Emissions Requirements

- i. Pursuant to 40 CFR 97.406(c)(1), beginning January 1, 2015,

- A. As of the allowance transfer deadline for a control period in a given year, the owner and operator shall hold, in the source's compliance account, TR NO_x Annual allowances available for deduction for such control period under 40 CFR 97.424(a) and 97.406(c)(3) in an amount not less than the tons of total NO_x emissions for such control period from Powerton Units 5 and 6.

- B. If total NO_x emissions during a control period in a given year from the TR NO_x Annual units at a TR NO_x Annual source are in excess of the TR NO_x Annual emissions limitation set forth in paragraph (a)(i)(A) above, then:

- I. The owner and operator and each TR NO_x Annual unit at the source shall hold

the TR NO_x Annual allowances required for deduction under 40 CFR 97.424(d); and

- II. The owner and operator and each TR NO_x Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart ~~AAAAA~~ and the Clean Air Act.
- ii. Beginning January 1, 2017, if total NO_x emissions during a control period in a given year from all TR NO_x Annual units at TR NO_x Annual sources in Illinois exceed the Illinois assurance level, the owner and operator shall comply with the provisions of 40 CFR 97.406(c) (2).
- iii. Compliance periods.
 - A. A TR NO_x Annual unit shall be subject to the requirements under Condition 6.4.2(a)(i) for the control period starting on January 1, 2015, and for each control period thereafter [40 CFR 97.406(c) (3) (i)].
 - B. A TR NO_x Annual unit shall be subject to the requirements under Condition 6.4.2(a) (ii) above for the control period starting on January 1, 2017, and for each control period thereafter [40 CFR 97.406(c) (3) (ii)].
- iv. Vintage of allowances held for compliance.
 - A. A TR NO_x Annual allowance held for compliance with the requirements under Condition 6.4.2(a) (i) (A) for a control period in a given year must be a TR NO_x Annual allowance that was allocated for such control period or a control period in a prior year [40 CFR 97.406(c) (4) (i)].
 - B. A TR NO_x Annual allowance held for compliance with the requirements under Conditions 6.4.2(a)(i) (B) or 6.4.2(a)(ii) for a control period in a given year must be a TR NO_x Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the

immediately following year [40 CFR 97.406(c)(4)(ii)].

v. Allowance Management System requirements. Each TR NO_x Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart AAAAA [40 CFR 97.406(c)(5)].

vi. Limited authorization. A TR NO_x Annual allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:

A. Such authorization shall only be used in accordance with the TR NO_x Annual Trading Program [40 CFR 97.406(c)(6)].

b. TR NO_x Ozone Season Emissions Requirements

i. Pursuant to 40 CFR 97.506(c)(1), beginning May 1, 2015,

A. As of the allowance transfer deadline for a control period in a given year, the owner and operator shall hold, in the source's compliance account, TR NO_x Ozone Season allowances available for deduction for such control period under 40 CFR 97.524(a) and 97.506(c)(3) in an amount not less than the tons of total NO_x emissions for such control period from Powerton Units 5 and 6.

B. If total NO_x emissions during a control period in a given year from the TR NO_x Ozone Season units at a TR NO_x Ozone Season source are in excess of the TR NO_x Ozone Season emissions limitation set forth in Condition 6.4.2(b)(i)(A) above, then:

I. The owner and operator and each TR NO_x Ozone Season unit at the source shall hold the TR NO_x Annual allowances required for deduction under 40 CFR 97.524(d); and

II. The owner and operator and each TR NO_x Ozone Season unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton

of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart BBBBB and the Clean Air Act.

ii. Beginning May 1, 2017, if total NO_x emissions during a control period in a given year from all TR NO_x Ozone Season units at TR NO_x Ozone Season sources in Illinois exceed the Illinois assurance level, the owner and operator shall comply with the provisions of 40 CFR 97.506(c) (2).

iii. Compliance periods.

A. A TR NO_x Ozone Season unit shall be subject to the requirements under Condition 6.4.2(b) (i) for the control period starting on May 1, 2015, and for each control period thereafter [40 CFR 97.506(c) (3)(i)].

B. A TR NO_x Ozone Season unit shall be subject to the requirements under Condition 6.4.2(b)(ii) above for the control period starting on May 1, 2017, and for each control period thereafter [40 CFR 97.506(c) (3) (ii)].

iv. Vintage of allowances held for compliance.

A. A TR NO_x Ozone Season allowance held for compliance with the requirements under Condition 6.4.2(b) (i) (A) for a control period in a given year must be a TR NO_x Annual allowance that was allocated for such control period or a control period in a prior year [40 CFR 97.506(c) (4) (i)].

B. A TR NO_x Ozone Season allowance held for compliance with the requirements under Conditions 6.4.2(b) (i) (B) or 6.4.2(b) (ii) for a control period in a given year must be a TR NO_x Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year [40 CFR 97.506(c)(4)(ii)].

v. Allowance Management System requirements. Each TR NO_x Ozone Season allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in

accordance with 40 CFR part 97, subpart BBBBB [40 CFR 97.506(c)(5)].

- vi. Limited authorization. A TR NO_x Ozone Season allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:

- A. Such authorization shall only be used in accordance with the TR NO_x Ozone Season Trading Program [40 CFR 97.506(c)(6)].

c. TR SO₂ Emissions Requirements

- i. Pursuant to 40 CFR 97.606(c)(1), beginning January 1, 2015,

- A. As of the allowance transfer deadline for a control period in a given year, the owner and operator shall hold, in the source's compliance account, TR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) and 97.606(c)(3) in an amount not less than the tons of total SO₂ emissions for such control period from Powerton Units 5 and 6.

- B. If total SO₂ emissions during a control period in a given year from the TR SO₂ Group 1 units at a TR SO₂ Group 1 source are in excess of the TR SO₂ Group 1 emissions limitation set forth in paragraph (c)(i)(A) above, then:

- I. The owner and operator and each TR SO₂ Group 1 unit at the source shall hold the TR SO₂ Group 1 allowances required for deduction under 40 CFR 97.624(d); and

- II. The owner and operator and each TR SO₂ Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart CCCCC and the Clean Air Act.

- ii. Beginning January 1, 2017, if total SO₂ emissions during a control period in a given year from all

TR SO₂ Group 1 units at TR SO₂ Group 1 sources in Illinois exceed the Illinois assurance level, the owner and operator shall comply with the provisions of 40 CFR 97.606(c) (2).

iii. Compliance periods.

- A. A TR SO₂ Group 1 unit shall be subject to the requirements under Condition 6.4.2(c) (i) for the control period starting on January 1, 2015, and for each control period thereafter [40 CFR 97.606(c) (3) (i)].
- B. A TR SO₂ Group 1 unit shall be subject to the requirements under Condition 6.4.2(c)(ii) above for the control period starting on January 1, 2017, and for each control period thereafter [40 CFR 97.606(c)(3)(ii)].

iv. Vintage of allowances held for compliance.

- A. A TR SO₂ Group 1 allowance held for compliance with the requirements under Condition 6.4.2(c)(i)(A) for a control period in a given year must be a TR SO₂ Group 1 allowance that was allocated for such control period or a control period in a prior year [40 CFR 97.606(c) (4)(i)].
- B. A TR SO₂ Group 1 allowance held for compliance with the requirements under Conditions 6.4.2(c)(i)(B) or 6.4.2(c)(ii) for a control period in a given year must be a TR SO₂ Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year [40 CFR 97.606(c)(4) (ii)].

v. Allowance Management System requirements. Each TR SO₂ Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart CCCCC [40 CFR 97.606(c) (5)].

vi. Limited authorization. A TR SO₂ Group 1 allowance is a limited authorization to emit one ton of SO₂ during the control period in one year. Such authorization is limited in its use and duration as follows:

- A. Such authorization shall only be used in accordance with the TR SO₂ Group 1 Trading Program [40 CFR 97.606(c)(6)].

6.4.3 Monitoring, Recordkeeping, and Reporting

- a. The owner or operator must submit to the USEPA Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable [40 CFR 97.434(b), 40 CFR 97.534(b) and 40 CFR 97.634(b)].
- b. For TR NO_x Annual emissions, the owner or operator shall comply with the continuous monitoring, recordkeeping, and reporting provisions specified in 40 CFR Part 97 Subpart AAAAA, and 40 CFR Part 75 Subpart H. These provisions include the calculation requirements specified at 40 CFR 97.406(b)(2); the recordkeeping and reporting requirements specified at 40 CFR 97.406(e); the general monitoring, recordkeeping, and reporting requirements specified at 40 CFR 97.430; the monitoring system certification and recertification requirements specified at 40 CFR 97.431; the monitoring system out-of-control requirements specified at 40 CFR 97.432; the notification requirements specified at 40 CFR 97.433; the recordkeeping and reporting requirements specified at 40 CFR 97.434; and the petitions for alternatives to monitoring, recordkeeping, or reporting requirements specified at 40 CFR 75.66 and 97.435.
- c. For TR NO_x Ozone Season emissions, the owner or operator shall comply with the continuous monitoring, recordkeeping, and reporting provisions specified in 40 CFR Part 97 Subpart BBBB, and 40 CFR Part 75 Subpart H. These provisions include the calculation requirements specified at 40 CFR 97.506(b)(2); the recordkeeping and reporting requirements specified at 40 CFR 97.506(e); the general monitoring, recordkeeping, and reporting requirements specified at 40 CFR 97.530; the monitoring system certification and recertification requirements specified at 40 CFR 97.531; the monitoring system out-of-control requirements specified at 40 CFR 97.532; the notification requirements specified at 40 CFR 97.533; the recordkeeping and reporting requirements specified at 40 CFR 97.534; and the petitions for alternatives to monitoring, recordkeeping, or reporting requirements specified at 40 CFR 75.66 and 97.535.
- d. For TR SO₂ Group 1 emissions, the owner or operator shall comply with the continuous monitoring,

recordkeeping, and reporting provisions specified in 40 CFR Part 97 Subpart CCCCC, and 40 CFR Part 75 Subparts B, F and G. These provisions include the Calculation requirements specified at 40 CFR 97.606(b)(2); the recordkeeping and reporting requirements specified at 40 CFR 97.606(e); the general monitoring, recordkeeping, and reporting requirements specified at 40 CFR 97.630; the monitoring system certification and recertification requirements specified at 40 CFR 97.631; the monitoring system out-of-control requirements specified at 40 CFR 97.632; the notification requirements specified at 40 CFR 97.633; the recordkeeping and reporting requirements specified at 40 CFR 97.634; and the petitions for alternatives to monitoring, recordkeeping, or reporting requirements specified at 40 CFR 75.66 and 97.635.

6.4.4 Designated Representative and Alternate Designated Representative

Pursuant to 40 CFR 97.406(a), 40 CFR 97.506(a), and 40 CFR 97.606(a), the owners and operators shall comply with the requirement to have a Designated Representative, and may also have an Alternate Designated Representative for Powerton Units 5 and 6, in accordance with 40 CFR 97.413 through 418 for the TR NO_x Annual Trading Program; 40 CFR 97.513 through 518 for the TR NO_x Ozone Season Trading Program; and 40 CFR 97.613 through 618 for the TR SO₂ Group 1 Trading Program.

6.4.5 Coordination with Other Requirements

- a. Any provisions of the TR NO_x Annual or Ozone Season or TR SO₂ Group 1 Trading Program that applies to a source or the designated representative shall also apply to the owners and operators of such source and the TR NO_x Annual or Ozone Season or TR SO₂ Group 1 units at the source [40 CFR 97.406(f)(1), 97.506(f)(1) and 97.606(f)(1)].
- b. Any provisions of the TR NO_x Annual or Ozone Season or TR SO₂ Group 1 Trading Program that applies to a TR NO_x Annual or Ozone Season or TR SO₂ Group 1 unit or the designated representative shall also apply to the owners and operators of such unit [40 CFR 97.406(f)(2), 97.506(f)(2) and 97.606(f)(2)].
- c. This permit does not contain any conditions that are intended to interfere with or modify the requirements of the Transport Rule, 40 CFR Part 97 Subparts AAAAA, BBBBB or CCCcC.

- d. Where another applicable requirement of the CAA is more stringent than an applicable requirement of 40 CFR Part 97 Subparts AAAAA, BBBBB, or CCCCC, both requirements are incorporated into this permit and are enforceable and the owners and operators of the source shall comply with both requirements [Section 39.5(7)(h) of the Act].
- e.
 - i. No revision of this CAAPP permit is required for any allocation, holding, deduction, or transfer of TR NOx Annual or Ozone Season or TR SO2 Group 1 allowances in accordance with 40 CFR Part 97 Subparts AAAAA, BBBBB, or CCCCC [40 CFR 97.406(d)(1), 97.506(d)(1) and 97.606(d)(1)].
 - ii. A description of whether a unit is required to monitor and report NOX emissions using a continuous emission monitoring system (under of 40 CFR 75 Subpart H), an excepted monitoring system (under 40 CFR 75 Appendices D and E), a low mass emissions excepted monitoring methodology (under 40 CFR 75.19) or an alternative monitoring system (under 40 CFR 75 Subpart E) in accordance with 40 CFR 97.430 through 97.435, 40 CFR 97.530 through 97.535, or 40 CFR 97.630 through 97.635 may be added to, or changed in, a title V permit using minor permit modification procedures in accordance with 40 CFR 70.7(e)(2) and 40 CFR 71.7(e)(1), provided that the requirements applicable to the described monitoring and reporting (as added or changed, respectively) are already incorporated in such permit. This condition explicitly provides that the addition of, or change to, a unit's description as described in the prior sentence is eligible for minor permit modification procedures in accordance with 40 CFR 70.7(e)(2)(i)(B) and 40 CFR 71.7(e)(1)(i)(B) [40 CFR 97.406(d)(2), 97.506(d)(2) and 97.606(d)(2)].

6.4.6 Effect on Other Authorities

No provision of the TR NOx Annual or Ozone Season or TR SO2 Group 1 Trading Programs or exemption under 40 CFR 97.405, 97.505 or 96.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NOx Annual or Ozone Season or TR SO2 Group 1 source or unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act [40 CFR 97.406(g), 97.506(g) and 97.606(g)].

6.5 Control of Mercury Emissions from Coal-fired Electric Generating Units

6.5.1 Description

The purpose of 35 IAC Part 225 Subpart B is to limit the emissions of mercury from coal-fired EGUs operating in Illinois. Compliance with mercury emission limits is demonstrated through continuous emission monitoring with either mercury CEMS units or Sorbent Trap Monitoring Systems.

Note: The description in Condition 6.5.1 is for informational purposes only and implies no limits or constraints.

6.5.2 List of Affected Emission Units

This source is an affected source and the following emission units at the source are affected EGUs for mercury control:

Boiler 51,
Boiler 52,
Boiler 61, and
Boiler 62.

6.5.3 Applicability

The affected source is part of the Combined Pollutant Standard (CPS) Group. As an alternative to compliance with the emissions standards of 35 IAC 225.230(a), the Permittee of specified EGUs in the CPS located at Joliet, Powerton, Waukegan, and Will County power plants elect for all of those EGUs as a group to demonstrate compliance pursuant to the CPS, which establishes control requirements and emissions standards for NO_x, SO₂ (Powerton, Waukegan and Will County), and mercury. For this purpose, ownership of a specified EGU is determined based on direct ownership, by holding a majority interest in a company that owns the EGU or EGUs, or by the common ownership of the company that owns the EGU, whether through a parent-subsidiary relationship, as a sister corporation, or as an affiliated corporation with the same parent corporation, provided that the owner or operator has the right or authority to submit a CAAPP application on behalf of the EGU.

6.5.4 Emission Standards

- a. Pursuant to 35 IAC 225.294(c), the Permittee shall comply with one of the following standards for the affected EGUs on a rolling 12-month basis:

- i. An emission standard of 0.0080 lb mercury/GWh gross electrical output; or
 - ii. A minimum 90-percent reduction of input mercury.
- b. Pursuant to 35 IAC 225.295(a)(1) through (3), for the EGUs in the CPS Group, the Permittee shall comply with an overall NO_x annual emission rate and ozone season rate of no more than 0.11 lb/million Btu.
- c. Pursuant to Illinois Pollution Control Board Case No. PCB 2013-024, the Permittee has been granted variances for the EGUs in the CPS Group from the applicable requirements of 35 IAC 225.295(b) until January 1, 2017, subject to the following conditions:
 - i. Continuing through the fourth quarter of 2016, Midwest Generation must submit quarterly progress reports to the Illinois EPA within two weeks following the end of each calendar quarter, and upon request, meet with the Agency to apprise the Agency of actions taken related to compliance with the variance, and in particular Midwest Generation's progress toward compliance with the 2017 SO₂ emission rate of 35 IAC 225.295(b). The quarterly reports must include an itemization of activities completed during the quarter, activities planned to be completed in the forthcoming quarter, and progress of projects to comply with the deadlines specified in these conditions.
 - ii. By December 31 of each year through 2016, Midwest Generation must submit annual progress reports to the Illinois EPA generally describing the work completed that year and progress made to comply with the deadlines specified in these conditions. The annual progress report must also include a general description of the activities related to installation of the trona systems and related particulate matter (PM) control work that Midwest Generation anticipates will be conducted the following year, including the status of the engineering for the projects and whether such projects have been included in the year's budgeting.
 - iii. From January 1, 2015 through December 31, 2016, Midwest Generation must comply with a system-wide average annual SO₂ emission rate of 0.38 lb/mmBtu.

- iv. From January 1, 2016 through December 31, 2016, Midwest Generation must limit its system-wide mass emissions of SO₂ to no more than 37,000 tons.
 - v. By May 1, 2017, Midwest Generation must report to the Illinois EPA its system-wide mass SO₂ emissions for 2016 with its Annual Emissions Report.
 - vi. From January 1, 2017 through December 31, 2017, Midwest Generation must comply with the rate set forth in Section 225.295(b) of the CPS (35 IAC 225.295(b)) for 2017 of 0.15 lb/mmBtu.
 - vii. Upon the Illinois EPA's request, promptly provide the Illinois EPA with additional information related to the Compliance Scenario under Condition 6.4.4(c)(iii) above.
 - viii. Notify the Illinois EPA promptly if completion of the trona system installations and associated PM controls necessary for compliance with the CPS becomes infeasible.
- d. Pursuant to 35 IAC 225.295(b) after December 31, 2017, the CPS group must comply with the applicable CPS group average annual SO₂ emissions rate listed below. For these purposes, the CPS group includes only those specified EGUs that combust coal.

Year	SO ₂ Emission Rate (lbs/mmBtu)
2018	0.13
2019	0.11

- e. Pursuant to 35 IAC 225.295(c), compliance with the NO_x and SO₂ emissions standards in Conditions 6.5.4(b) and (d) must be demonstrated in accordance with 35 IAC 225.310, 225.410, and 225.510. The owner or operator of the specified EGUs must complete the demonstration of compliance pursuant to 35 IAC 225.298(c) before March 1 of the following year for annual standards and before November 30 of the particular year for ozone season control periods (May 1 through September 30) standards, by which date a compliance report must be submitted to the Illinois EPA.

6.5.5 Monitoring

For the affected EGUs, the Permittee shall operate and maintain all monitoring systems required pursuant to 35 IAC 225.240 through 225.290 for monitoring mercury mass

emissions (including all systems required to monitor mercury concentration, stack gas moisture content, stack gas flow rate, and CO₂ or O₂ concentration, as applicable, in accordance with Sections 1.15 and 1.16 of Appendix B to 35 IAC Part 225).

6.5.6 Recordkeeping

- a. The Permittee shall maintain records for each month identifying the emission standard in 35 IAC 225.230(a) used to demonstrate compliance or that is applicable for the affected EGUs and the records related to the emissions of mercury that the EGUs are allowed to emit.
- b. The Permittee shall maintain records of the following data for the EGUs:
 - i. Monthly emissions of mercury from the EGUs.
 - ii. For EGUs complying by means of 35 IAC 225.230(b) or (d), records of the monthly allowable emissions of mercury from the EGU.
- c. The Permittee shall maintain records related to quality assurance activities conducted for emissions monitoring systems conducted pursuant to Section 2.2 of Exhibit B to Appendix B to 35 IAC 225 Subpart B.
- d. The Permittee shall maintain a Mercury Emissions Monitoring Plan as specified in Section 1.10 of Appendix B of 35 IAC Part 225 Subpart B.

6.5.7 Reporting

- a. Quarterly Reports. For EGUs using CEMS or excepted monitoring systems at any time during a calendar quarter, the Permittee shall submit quarterly reports and compliance certifications to the Illinois EPA as required by 35 IAC 225.290(b) and (c).
- b. Annual Certification of Compliance. For EGUs subject to 35 IAC Part 225 Subpart B, the Permittee shall submit to the Illinois EPA an Annual Certification of Compliance with 35 IAC Part 225 Subpart B no later than May 1 of each year and address compliance for the previous calendar year. Such certification must contain the information required by 35 IAC 225.290 and be certified by a responsible official. [35 IAC 225.290(d)]
- c. Deviation Reports. For the EGUs, the Permittee shall promptly notify the Illinois EPA of deviations from requirements of 35 IAC Part 225 Subpart B. These

notifications must include a description of such deviations within 30 days after discovery of the deviations, and a discussion of the possible cause of such deviations, any corrective actions, and any preventative measures taken. [35 IAC 225.290(e)]

- d. Quality Assurance RATA Reports. The Permittee shall submit to the Illinois EPA, Air Compliance Section, the quality assurance RATA report for the EGUs (i.e., the group of EGUs monitored at a common stack) pursuant to Section 1.16(b) (2) (B) of Appendix B to 35 IAC Part 225 Subpart B, within 45 days after completing a quality assurance RATA. [35 IAC 225.290(f)]

6.6 Mercury and Air Toxics Standards (MATS) (40 CFR 63 Subpart UUUUU)

6.6.1 Description

On December 16, 2011, the USEPA signed a rule to limit emissions of hazardous air pollutants from power plants. Specifically, these mercury and air toxics standards (MATS) for power plants limit emissions from new and existing coal and oil-fired electric utility steam generating units (EGUs).

The rule establishes numeric emission standards for non-mercury HAP metals, mercury, and non-organic acid gases. It also establishes surrogate emission standards, including SO₂ (as a surrogate for non-organic acid gases), and filterable PM (as a surrogate for non-mercury HAP metals).

The standards set work practices for emissions of organic HAPs, including dioxin/furan. The work practice standards require periodic tune-ups for each unit that involves inspection, adjustment, and/or maintenance and repairs (if necessary) to ensure efficient combustion.

Note: The description in Condition 6.6.1 is for informational purposes only and implies no limits or constraints.

6.6.2 Applicability Provisions

Certain affected sources, as specified below, are "affected electric utility steam generating units (EGUs)" for the purposes of the National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units, pursuant to 40 CFR 63.9981 and 40 CFR 63.9982(a)(1), because the Permittee owns or operates coal fired EGUs as defined at 40 CFR 63.10042. These affected EGUs are subject to the applicable requirements of the NESHAP, 40 CFR 63 Subpart UUUUU, and related requirements in the NESHAP General Provisions, 40 CFR 63 Subpart A.

Units 5 and 6

The affected EGUs are in the subcategory of existing EGUs designed for coal with a heating value greater than or equal to 8300 Btu/lb [40 CFR 63.9990].

6.6.3 Applicable Requirements

- a. Unless an affected EGU complies with the LEE requirements in Condition 6.6.9(b) or alternative requirements in Conditions 6.6.9(c) or (d), the

Permittee shall comply with the following applicable requirements:

- i. For non-mercury HAP metals,
 - A. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, emissions from the affected EGUs shall comply with one of the following limits:
 - I. Emissions of filterable particulate matter shall not exceed:
 - a. 0.030 lb/mmBtu (mass per heat input); or
 - b. 0.30 lb/MWh (mass per gross output).
 - II. As an alternative to the standard in Condition 6.6.3(a)(i)(A)(I), the Permittee may elect to comply with the standard for individual or total non-mercury HAP metals as set forth in Condition 6.6.9(c).
- ii. For mercury,
 - A. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, for affected EGUs not using emissions averaging, emissions of mercury from the affected EGUs shall not exceed, as a 30-boiler operating day rolling average:
 - I. 1.2 lb/TBtu (mass per heat input); or
 - II. 0.013 lb/GWh (mass per gross output).
 - B. Pursuant to 40 CFR 63.10009(a)(2), if the Permittee is using emissions averaging for mercury, emissions from the affected EGUs shall not exceed, as a 90-group boiler operating day rolling average:
 - I. 1.0 lb/TBtu (mass per heat input); or
 - II. 0.011 lb/GWh (mass per gross output).
- iii. For acid gases,
 - A. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, emissions

from the affected EGUs shall comply with one of the following limits:

- I. Emissions of Hydrogen Chloride shall not exceed:
 - a. 0.0020 lb/mmBtu (mass per heat input); or
 - b. 0.020 lb/MWh (mass per gross output).
 - II. As an alternative to the standard in Condition 6.6.3(a)(iii)(A)(I), the Permittee may elect to comply with the standard for SO₂ as set forth in Condition 6.6.9(d).
- b. The Permittee may use the emissions averaging provisions of 40 CFR 63.10009 and 40 CFR 63.10022 to demonstrate compliance with the emission standards specified in Conditions 6.6.3(a)(i), (ii)(B) and (iii).
 - c. If the Permittee elects to switch from heat input based limits to gross output based limits (or vice-versa) in Condition 6.6.3(a) or to an alternate emission standard or provision in Conditions 6.6.9(c) through (e), the Permittee shall comply with the Notification of Compliance Status requirements in Condition 6.6.9(a).
 - d. Pursuant to 40 CFR 63.10000(b), at all times the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
 - e. Performance Tune-up Work Practices:

Pursuant to 40 CFR 63.9991(a)(1), and item 1 of Table 3 to Subpart UUUUU of 40 CFR Part 63, the Permittee shall conduct a tune-up of the EGU burner and combustion controls at least every 36 calendar months, or each 48 months if neural network

combustion optimization software is employed, as specified at 40 CFR 63.10021(e).

6.6.4 Applicable Monitoring and Testing Requirements

a. Unless an affected EGU complies with the LEE requirements in Condition 6.6.9(b) or alternative requirements in Conditions 6.6.9(c) or (d), the Permittee shall comply with the following applicable requirements:

i. For non-mercury HAP metals,

Pursuant to 40 CFR 63.10000(c)(1)(iv), in order to demonstrate compliance with the filterable particulate matter emission standard specified in Condition 6.6.3(a)(i)(A), the Permittee shall monitor continuous performance through performance testing repeated quarterly.

ii. For mercury,

The Permittee shall monitor emissions of mercury from affected EGUs using a sorbent trap monitoring system in accordance with 40 CFR 63.10010(g), 40 CFR 63.10020(a) through (d), and Appendix A to 40 CFR Part 63 Subpart UUUUU.

iii. For acid gases,

Pursuant to 40 CFR 63.10000(c)(1)(v), to demonstrate compliance with the HCl emission limit specified in Condition 6.6.3(a)(iii), the Permittee shall demonstrate continuous compliance through HCl performance testing repeated quarterly.

iv. For Continuous Monitoring Systems,

A. The Permittee shall comply with the provisions of 40 CFR 63.10010(b), (c) and (d), and 40 CFR 63.10020(a) through (d) regarding CO₂ CEMS, stack gas flow rate monitoring, and stack gas moisture content.

B. Pursuant to 40 CFR 63.10007(f), since the Permittee uses a continuous monitoring system to monitor emissions of mercury, the Permittee may use the diluent cap and default gross output values as specified at 40 CFR 63.10007(f)(1) and (2) in emission rate calculations during startup and shutdown periods.

6.6.5 General Testing Requirements

- a. Pursuant to 63.10021(a), the Permittee shall conduct all performance testing in accordance with the requirements of 40 CFR 63.10007 and item 1 in Table 2, Table 5, and item 4 in Table 7 to Subpart UUUUU of 40 CFR Part 63.

6.6.6 General Recordkeeping Requirements

- a. The Permittee shall keep copies of any information and reports submitted to comply with the requirements of 40 CFR Part 63 Subpart UUUUU, and copies of any performance stack tests, CMS performance evaluations, and compliance demonstrations as specified at 40 CFR 63.10032(a).
- b. The Permittee shall keep records for any CMS as specified at 40 CFR 63.10032(b) and 40 CFR 63.10(c).
- c. The Permittee shall keep records of any monitoring data as specified at 40 CFR 63.10032(c) and 63.10(b) (2) (vii) through (ix).
- d. Pursuant to 40 CFR 63.10032(d), the Permittee shall keep records of the following:
 - i. Monthly fuel use by each EGU, including the type(s) of fuel and amount(s) used [40 CFR 63.10032 (d) (1)],
 - ii. For combustion of non-hazardous secondary materials that have been determined not to be solid waste pursuant to 40 CFR 241.3(b)(1), documentation for how the secondary material meets each of the legitimacy criteria [40 CFR 63.10032(d) (2)],
 - iii. For combustion of a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(2), documentation as to how the operations that produced the fuel satisfies the definition of processing in 40 CFR 241.2 [40 CFR 63.10032(d) (2)],
 - iv. For receipt of a non-waste determination pursuant to the petition process submitted under 40 CFR 241.3(c), documentation for how the fuel satisfies the requirements of the petition process [40 CFR 63.10032 (d) (2)], and
 - v. For an EGU that qualifies as an LEE under 40 CFR 63.10005(h), annual records that document that emissions in the previous stack test(s) continue

to qualify the unit for LEE status for an applicable pollutant, and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the pollutant to increase within the past year [40 CFR 63.10032(d)(3)].

- e. The Permittee shall keep records for any emissions averaging as specified at 40 CFR 63.10032(e).
- f. The Permittee shall keep records regarding any startup or shutdown periods as specified at 40 CFR 63.10032(f) and (i).
- g. The Permittee shall keep records regarding any equipment malfunctions as specified at 40 CFR 63.10032(g) and (h).
- h. The Permittee shall keep records of any maintenance performed on air pollution control and monitoring equipment as specified at 40 CFR 63.10(b)(2)(iii).
- i. The Permittee shall keep records of any continuous monitoring system malfunctions and inoperative periods as specified at 40 CFR 63.10(b)(2)(vi).
- j. The Permittee shall keep records of any periods of monitored excess emissions as specified at 40 CFR 63.10(c)(7) and (8).
- k. The Permittee shall keep sorbent trap monitoring systems and other CMS system records as specified in Section 7.1 of Appendix A to 40 CFR Part 63 Subpart UUUUU.
- l. Pursuant to 40 CFR 63.10033 and 40 CFR 63.10(b)(1), the Permittee shall keep any required records on site for at least the first two years, but may be kept off-site after the first two years.

6.6.7 Reporting Requirements

- a. Pursuant to 40 CFR 63.10030(a), the Permittee shall submit the following notifications, as applicable, in accordance with the specified regulatory provision(s):
 - i. Periodic Test Notifications, as specified at 40 CFR 63.7(b), 40 CFR 63.9(e), and 63.10030(d), to be submitted at least 30 days before the test is scheduled to begin.

- ii. Continuous Monitoring System Performance Evaluation Notices, as specified at 40 CFR 63.8(e).
 - iii. Alternative Monitoring Requests, as specified at 40 CFR 63.8(f)(4).
 - iv. Alternative RATA Requests, as specified at 40 CFR 63.8(f)(6).
 - v. Special Compliance Requirements Notices, as specified at 40 CFR 63.9(d).
 - vi. Additional CMS Notifications, as specified at 40 CFR 63.9(g).
 - vii. Notifications of Compliance Status, as specified at 40 CFR 63.9(h), 40 CFR 63.10030(e) and Condition 6.6.9(a)(i).
- b. Pursuant to 40 CFR 63.10031(b), the Permittee shall submit a Semiannual Compliance Report no later than January 31 and July 31 of each year. Each Semiannual Compliance Report shall contain the information specified at 40 CFR 63.10031(c) through (d) and (g).
- i. Pursuant to 40 CFR 63.10031(e), the Permittee shall report deviations from the applicable requirements of 40 CFR 63 Subpart UUUUU (as defined at 40 CFR 63.10042) in the Semiannual Compliance Report.
- c. Pursuant to 40 CFR 63.10031(f) and 40 CFR 63.10(d)(1) and (2), the Permittee shall submit reports of performance tests and CEMS performance evaluations required by 40 CFR 63 Subpart UUUUU no later than 60 days after completion.
- d. The Permittee shall comply with any applicable reporting requirements for mercury CEMS and sorbent trap monitoring systems specified at Sections 7.2.1 through 7.2.4 of Appendix A to 40 CFR 63 Subpart UUUUU.
- e. Pursuant to Section 7.2.5 of Appendix A to 40 CFR 63 Subpart UUUUU, the Permittee shall submit any required mercury CEMS and sorbent trap monitoring system data quarterly within 30 days after the end of each calendar quarter, using the Emissions Collection and Monitoring Plan System (ECMPS) Client Tool.

6.6.8 Startup/Shutdown Provisions

- a. Pursuant to 40 CFR 63.9991(a)(1) and 40 CFR 63.10021(h), the Permittee shall comply with the control device operation, fuel usage, monitoring, recordkeeping, and reporting requirements specified in items 3 and 4 of Table 3 to Subpart UUUUU of 40 CFR Part 63 during startup periods and shutdown periods (as those terms are defined at 40 CFR 63.10042) of the affected EGUs.
 - i. The Permittee has elected to use paragraph (1) of the definition of "startup" in 40 CFR 63.10042, and must therefore operate all CMS during startup and use "clean fuels" as defined at 40 CFR 63.10042 for ignition.
 - ii. Pursuant to 40 CFR 63.10030(e)(8)(iii), the Permittee may switch from paragraph (1) of the definition of "startup" in 40 CFR 63.10042 to paragraph (2) of the definition of "startup" (or vice-versa), provided that the Permittee follows the requirement in Condition 6.6.9(a)(ii).

6.6.9 Alternative Requirements

a. Notification Requirements:

Pursuant to Section 39.5(7)(b) of the Act and 40 CFR 63.10030(e)(8)(iii)(A),

- i. If the Permittee elects to change from compliance with a mass per heat input basis emission limit (e. g., lb/mmBtu) to a mass per gross output basis emission limit (e. g., lb/GW-hr), or vice-versa, the Permittee shall comply with the requirements specified at 40 CFR 63.10030(e)(7)(iii)(A) through (C).
- ii. A. If the Permittee elects to switch from the paragraph (1) definition of startup at 40 CFR 63.10042 to the paragraph (2) definition of startup, or vice-versa, the Permittee shall comply with the requirements specified at 40 CFR 63.10030(e)(8)(iii)(A) through (E).
- B. Pursuant to 40 CFR 63.10030(e)(8)(i), should the Permittee choose to rely on paragraph (2) of the definition of "startup" in 40 CFR 63.10042 for an EGU, the Permittee shall submit a report that identifies EGU and PM control device design characteristics and other information as

specified at 40 CFR 63.10030 (e) (8)(i) (A) through (K) that shall be prepared, signed, and sealed by a professional engineer licensed in Illinois.

- iii. If the Permittee elects to change other 40 CFR Part 63 Subpart UUUUU compliance demonstration methods as described by Condition 6.6.9(b) through (e) that renders the compliance demonstration methodology information contained in the most recently-submitted Notification of Compliance Status incorrect, the Permittee shall submit an advance notice to Illinois EPA at least 60 days prior to implementing the change. In the advance notice, the Permittee shall include the information necessary for Illinois EPA to determine the applicable requirements pertaining to the change, and any relevant performance test results necessary to demonstrate compliance with the new method, if applicable. The Permittee shall comply with written directives issued by Illinois EPA in response to such advance notice, and may proceed with implementing the change if not directed otherwise in writing by Illinois EPA within 45 days after submission of the change notice. The Permittee shall also comply with applicable requirements to submit a revised Notification of Compliance Status, including all performance test results and fuel analysis, to Illinois EPA before the close of business on the 60th day following completion of the performance test and/or other initial compliance demonstration.

b. Low Emitting EGU (LEE) Alternative Requirements:

i. LEE Status for mercury (Hg):

An EGU may qualify for LEE status for Hg if the Permittee collects performance test data that meet the requirements of 40 CFR 63.10005(h), and if those data demonstrate:

A. For Hg emissions from an existing EGU, either:

- I. Average emissions less than 10 percent of the applicable Hg emissions limit in Table 2 to 40 CFR Part 63 Subpart UUUUU (expressed either in units of lb/TBtu or lb/GWh); or
- II. Potential Hg mass emissions of 29.0 or fewer pounds per year and compliance

with the applicable Hg emission limit in Table 2 to 40 CFR Part 63 Subpart UUUUU (expressed either in units of lb/TBtu or lb/GWh).

- B. If test data demonstrate that an affected EGU qualifies for LEE status for the mercury emission standard specified in Condition 6.6.3(b)(i) by satisfying the LEE criteria specified at 63.10005(h)(1)(ii), the Permittee shall conduct performance testing as specified at 63.10005(h)(3) at least once every 12 calendar months, as specified at 40 CFR 63.10000(c)(1)(ii).
 - C. Pursuant to 40 CFR 63.10006(b)(2), if subsequent emission test results show that the affected EGU no longer satisfies the criteria for LEE status, the Permittee shall install, certify, operate, and maintain a mercury CEMS or sorbent trap monitoring system in accordance with Appendix A to 40 CFR Part 63 Subpart UUUUU within 6 months of losing LEE eligibility, and conduct quarterly mercury emissions testing until the mercury CEMS or sorbent trap monitoring system is installed, certified, and operating.
- ii. LEE Status for HCl, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals:

An EGU may qualify for LEE status for HCl, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals if the Permittee collects performance test data that meet the requirements of 40 CFR 63.10005(h), and if those data demonstrate:

- A. For HCl, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals, performance test emissions results less than 50 percent of the applicable emissions limits in Table 2 to 40 CFR Part 63, Subpart UUUUU for all required testing for 3 consecutive years.
- B. If test data demonstrates that an affected EGU qualifies for LEE status for total non-Hg HAP metals, individual non-Hg HAP metals, filterable particulate matter, or HCl standards specified in Conditions 6.6.3(a)(i)(A)(I), 6.6.9(c)(i)(A)(II), 6.6.9(c)(i)(A)(I), or 6.6.3(a)(iii)(A)(I),

respectively, by satisfying the LEE criteria specified at 63.10005(h)(1) and (2), the Permittee shall conduct a performance test at least once every 36 calendar months, as specified at 40 CFR 63.10000 (c) (1) (iii).

- C. Pursuant to 40 CFR 63.10006(b) (1), if subsequent emission test results show that the affected EGU no longer satisfies the criteria for LEE status, the Permittee shall resume conducting quarterly stack testing for total non-Hg HAP metals, individual non-Hg HAP metals, filterable PM, or HCl or shall install, certify, and operate a PM CEMS, HCl CEMS, SO₂ CEMS, or PM CPMS, as applicable.

c. i. Non-mercury HAP Metals Alternative Requirements:

- A. The Permittee may elect to comply with a non-mercury HAP metals standard as an alternative to the filterable particulate matter standard set forth in Condition 6.6.3(a) (i). Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, for affected EGUs not satisfying the criteria for LEE status, the Permittee may elect to comply with one of the following limits either individually or using the applicable emissions averaging provisions of 40 CFR 63.10009 and 63.10022:

- I. Emissions of total non-Hg HAP metals from the affected EGUs shall not exceed, as a 30-boiler day operating average, 0.000050 lb/mmBtu (mass per heat input) or 0.50 lb/GWh (mass per gross output); or
- II. Emissions of individual non-Hg HAP metals (Sb, As, Be, Cd, Cr, Co, Pb, Mn, Ni, Se) shall not exceed, the following limits specified in Table 2 to Subpart UUUUU of 40 CFR Part 63:

Pollutant:	Emission Limit (Mass Per Heat Input):	OR	Emission Limit (Mass Per Gross Output):
Antimony (Sb)	0.80 lb/TBtu	OR	0.0080 lb/GWh
Arsenic (As)	1.1 lb/TBtu	OR	0.020 lb/GWh
Beryllium (Be)	0.20 lb/TBtu	OR	0.0020 lb/GWh
Cadmium (Cd)	0.30 lb/TBtu	OR	0.0030 lb/GWh
Chromium (Cr)	2.8 lb/TBtu	OR	0.030 lb/GWh
Cobalt (Co)	0.80 lb/TBtu	OR	0.0080 lb/GWh
Lead (Pb)	1.2 lb/TBtu	OR	0.020 lb/GWh
Manganese (Mn)	4.0 lb/TBtu	OR	0.050 lb/GWh
Nickel (Ni)	3.5 lb/TBtu	OR	0.040 lb/GWh
Selenium (Se)	5.0 lb/TBtu	OR	0.060 lb/GWh

ii. Non-mercury HAP Metals Alternative Monitoring Provisions:

- A. If the Permittee elects to demonstrate compliance with the filterable particulate matter emission limit specified in Condition 6.6.9(c)(i)(A)(I) using PM CEMS, the Permittee shall install, certify, operate, and maintain the PM CEMS in accordance with the requirements specified at 40 CFR 63.10010(i) and 40 CFR 63.10020(a) through (d).
- B. If the Permittee elects to demonstrate compliance with the filterable particulate matter emission limit specified in Condition 6.6.9(c)(i)(A)(I) using PM CPMS, the Permittee shall install, certify, operate, and maintain the PM CPMS in accordance with the requirements specified at 40 CFR 63.10010(h) and 40 CFR 63.10020(a) through (d), and Table 6 to 40 CFR Part 63, Subpart UUUUU.

d. i. Acid Gases Alternative Emission Standards:

- A. The Permittee may elect to comply with a standard for emissions of SO₂ as an alternative the HCl standards set forth in Condition 6.6.3(a)(iii)(A) if the Permittee has a system using wet or dry flue gas desulfurization technology and SO₂ continuous emissions monitoring system (CEMS) installed on the unit. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, for affected EGUs not satisfying the criteria for LEE status, the Permittee may elect to comply with the following limit, either individually or using the applicable emissions averaging provisions of 40 CFR 63.10009 and 63.10022:

I. Emissions of SO₂ shall not exceed, as a 30-boiler operating day rolling average, 0.20 lb/mmBtu (mass per heat input) or 1.5 lb/MWh (mass per gross output).

B. Pursuant to 40 CFR 63.9991(c)(2), if the Permittee is complying with the SO₂ limit in Condition 6.6.9(d)(i)(A)(I), the Permittee must, at all times, operate the wet or dry flue gas desulfurization technology and the SO₂ CEMS installed on the affected units consistent with 40 CFR 63.10000(b).

ii. Acid Gases Alternative Monitoring Provisions:

If the Permittee elects to demonstrate compliance with the HCl emission limit specified in Condition 6.6.9(d)(i) using an HCl CEMS, the Permittee shall install, certify, operate, and maintain the HCl CEMS in accordance with the requirements specified at 40 CFR 63.10010(e), 40 CFR 63.10020(a) through (d), and Appendix B to 40 CFR Part 63 Subpart UUUUU.

e. Mercury Alternative Monitoring Provisions:

The Permittee may elect to monitor emissions of mercury from affected EGUs using a mercury CEMS monitoring system in accordance with 40 CFR 63.10010(g), 40 CFR 63.10020(a) through (d), and Appendix A to 40 CFR Part 63 Subpart UUUUU, as an alternative to a sorbent trap monitoring system, as described in Condition 6.6.4(a)(ii).

7.0 UNIT SPECIFIC CONDITIONS

7.1 Coal Fired Boilers

7.1.1 Description

The Permittee operates four coal-fired boilers for electric generation. The boilers supplying steam to two electrical generators, with two boilers serving one generator (Unit 5) and two boilers serving the other generator (Unit 6). The boilers, which were all built in the mid 1970's, have nominal capacities of 4116 mmBtu/hour each and are served by a single shared stack. These boilers also have the capability to fire natural gas as an auxiliary fuel during startup and shutdown and for flame stabilization.

Each boiler currently burns low-sulfur Powder River Basin coal as its primary fuel, which serves to reduce sulfur dioxide (SO₂) emissions. Dry sorbent injection (DSI) of trona (a mineral form of sodium carbonate and sodium bicarbonate) into the duct work at a point prior to the electrostatic precipitators (ESP) is also used on the boilers for control of SO₂ emissions.

Nitrogen oxide (NO_x) emissions from the boilers are controlled by overfire air (OFA) systems, rich reagent injection (RRI) systems and selective non-catalytic reduction (SNCR) systems.

Particulate matter (PM) emissions are controlled by electrostatic precipitators (ESP).

Mercury emissions are controlled by activated carbon injection (ACI) into the flue gas prior to the ESPs.

Note: The description in Condition 7.1.1 is for informational purposes only and implies no limits or constraints.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Boiler ID	Description	Emission Control Equipment
Boiler BLR 51	Babcock and Wilcox Boiler (1973)	OFA, ACI, RRI, SNCR, DSI and ESP
Boiler BLR 52	Babcock and Wilcox Boiler (1973)	OFA, ACI, RRI, SNCR, DSI and ESP
Boiler BLR 61	Babcock and Wilcox Boiler (1976)	OFA, ACI, RRI, SNCR, DSI and ESP
Boiler BLR 62	Babcock and Wilcox Boiler (1976)	OFA, ACI, RRI, SNCR, DSI and ESP

7.1.3 Applicability Provisions

- a. An "affected boiler" for the purpose of these unit-specific conditions, is a boiler described in Conditions 7.1.1 and 7.1.2.
- b. Startup Provisions

Subject to the following terms and conditions, the Permittee is authorized to operate an affected boiler in violation of the applicable standards in Condition 7.1.4(a) (35 IAC 212.123), Condition 7.1.4(b) (35 IAC 212.202), and Condition 7.1.4(d) (35 IAC 216.121) during startup. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally describing the efforts that will be used "...to minimize startup emissions, duration of individual startups and frequency of startups."

- i. This authorization does not relieve the Permittee from the continuing obligation to demonstrate that all reasonable efforts are made to minimize startup emissions, duration of individual startups and frequency of startups.
- ii. The Permittee shall conduct startup of an affected boiler in accordance with written procedures prepared by the Permittee and maintained in the control room for the boiler that are specifically developed to minimize emissions from startups and that include, at a minimum, the following measures:
 - A. Use of auxiliary fuel burners to heat the boiler prior to initiating burning of coal.
 - B. Timely energization of the electrostatic precipitator as soon as this may be safely accomplished without damage or risk to personnel or equipment.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.1.9(g) and 7.1.10-2(a).
- iv. As provided by 35 IAC 201.265, an authorization in a permit for excess emissions during startup does not shield a Permittee from enforcement for any violation

of applicable emission standard(s) that occurs during startup and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

c. Malfunction and Breakdown Provisions

Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected boiler in violation of the applicable requirements of Condition 7.1.4(a) (35 IAC 212.123), Condition 7.1.4(b) (35 IAC 212.202), and Condition 7.1.4(d) (35 IAC 216.121) in the event of a malfunction or breakdown of an affected boiler, including the coal conditioner, the ash removal system, or the electrostatic precipitator (including flue gas conditioning). This authorization is provided pursuant to 35 IAC 201.149, 201.261, and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

- i. This authorization only allows such continued operation as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable reduce boiler load, repair the affected boiler, remove the affected boiler from service or undertake other action so that excess emissions cease.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.1.9(h) and 7.1.10-3(a). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In

such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the boiler out of service.

- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.1.4 Applicable Emission Standards

- a. The affected boilers shall comply with the standard in Condition 5.2.2(b) [35 IAC 212.123], which addresses the opacity of the emission of smoke or other PM from the affected boilers.
- b. The emissions of PM from each affected boiler shall not exceed 0.1 lb/mmBtu of actual heat input in any one hour period, pursuant to 35 IAC 212.202.
- c. The emissions of SO₂ from each affected boiler shall not exceed 1.8 lbs/mmBtu of actual heat input, pursuant to 35 IAC 214.141.
- d. The emissions of CO from each affected boiler shall not exceed 200 ppm, corrected to 50 percent excess air, pursuant to 35 IAC 216.121.
- e. Pursuant to 35 IAC 214.602 and 214.603(e), the SO₂ emissions of the affected boilers, combined, shall not exceed the following limits.
 - i. 3452.00 pounds/hour on a 30-operating day rolling average basis, with compliance determined within 24 hours after the end of each averaging period using the equation in

35 IAC 214.603(e)(3). For this purpose, an operating day is a calendar day in which any affected boiler combusts any fuel. [35 IAC 214.603(e)(1), (2) and (3)]

- ii. 6,000 pounds/hour in more than 5 percent of the stack operating hours in each 30-operating day rolling period. For this purpose, a stack operating hour is a clock hour in which valid SO₂ emission data is obtained, and in which gases flow through the monitored stack or duct for the affected boilers (either for part of the hour or for the entire hour) while at least one of the boilers is combusting fuel. [35 IAC 214.603(e)(2) and (4)]

Note: These limits have not yet been approved by USEPA as part of Illinois State Implementation Plan.

- f. The EGUs at the source are subject to the following requirements related to NO_x emissions pursuant to 35 IAC Part 217 Subpart V:

- i. During each ozone control period (May 1 through September 30):
 - A. The emissions of NO_x from each EGU shall not exceed 0.25 lb/mmBtu of actual heat input based on an ozone control period average for that EGU, pursuant to 35 IAC 217.706(a), or
 - B. Notwithstanding the requirement in Condition 7.1.4(f)(i)(A), if the Permittee elects to participate in a NO_x averaging plan pursuant to 35 IAC 217.708(a), the average rate of emissions of NO_x from the Permittee's EGUs and all other eligible EGUs that are participating in such NO_x averaging demonstration shall not exceed 0.25 lb/mmBtu of actual heat input, as averaged for the ozone control period, pursuant to 35 IAC 217.708(a) and (b). For this purpose, eligible EGUs include: (1) EGUs at this source, which are authorized by this permit to participate in a NO_x averaging demonstration, and (2) any other EGU that is authorized to participate in a NO_x averaging plan by a CAAPP permit or other federally enforceable permit issued by the

Illinois EPA to the owner or operator of that EGU.

Note: Given the emission determination methods specified by 35 IAC 217.710, the emissions of NO_x for purposes of these standards are generally calculated in accordance with the federal Acid Rain Program and are different from the emissions determined for purposes of the NO_x Trading Program.

ii. If the Permittee elects to have an EGU comply by participation in a NO_x averaging demonstration as provided for and authorized above:

A. The EGU shall be included in only one NO_x averaging demonstration during an ozone control period, pursuant to 35 IAC 217.708(d).

B. The NO_x averaging demonstration shall only include other EGUs that are authorized through a federally enforceable permit to participate in a NO_x averaging demonstration and for which the owner or operator of the EGU maintains the required records, data and reports and submits copies of such records, data, and reports to the Illinois EPA upon request, pursuant to 35 IAC 217.708(c) and (g).

C. The effect of failure of the NO_x averaging demonstration to show compliance shall be that the compliance status of the EGU shall be determined pursuant to Condition 7.1.4(f) (i) (A) as if the NO_x emission rates of the EGUs were not averaged with other EGUs, pursuant to 35 IAC 217.708(f).

Note: The above requirements also apply as a matter of rule to EGUs other than the EGUs if the owner or operator of such other EGUs elects to participate in a NO_x averaging demonstration.

g. For the affected boilers, the applicable requirements of the Acid Rain Program are set forth in Condition 6.2.

- h. For the affected boilers, the applicable requirements pursuant to Best Available Retrofit Technology are set forth in Condition 6.3.
- i. For the affected boilers, the applicable requirements of the Cross-State Air Pollution Rule are set forth in Condition 6.4.
- j. For the affected boilers, the applicable requirements 35 IAC 225 Subpart B are set forth in Condition 6.5.
- k. For the affected boilers, the applicable requirements of the Mercury and Air Toxics Standards are set forth in Condition 6.6.

7.1.5 Non-Applicability of Regulations of Concern

- a. Pursuant to Section 39.5(7) (a) of the Act,
 - i. The Permittee is shielded from the following rules for the affected boilers when the boilers are using coal (solid fuel) as their principal fuel. This is because incidental use of natural gas generally serves as a good combustion practice for firing of solid fuel and does not provide a decrease in emissions that can be used to reduce the emission rate that must be achieved for the emissions associated with combustion of solid fuel.
 - A. 35 IAC 212.207.
 - ii. If an affected boiler is not using coal (solid fuel) as its principal fuel, the affected boiler shall comply with the requirements of the following condition. During such periods, for PM emissions, Condition 7.1.5(a)(ii) (A) shall substitute for Condition 7.1.4(b):
 - A. The emissions of PM from the affected boiler in any one hour period shall not exceed the amount, in lbs/hr, allowed by the formula in 35 IAC 212.207.
 - iii. For the purpose of the above conditions, an affected boiler shall be considered to be using coal (solid fuel) as its principal fuel if the use of natural gas is incidental to the use of coal, occurring for specific purposes associated with routine firing of solid fuel, such as startup, opacity

reduction emission mitigation, flame stabilization, or other temporary interruption in solid fuel supply. A boiler shall not be considered to be using solid fuel as its principal fuel if the use of natural gas is more than incidental to the firing of coal in the boiler or the use of coal is incidental to the operation of the boiler.

- iv. The Permittee shall notify the Illinois EPA if the status of an affected boiler changes to or from using coal (solid fuel) as its principal fuel. This notification shall be provided at least 7 days in advance of such change in status unless the change results from a sudden event that precludes such advance notification, in which case notification shall be provided as soon as practicable prior to the change.
- b. Pursuant to 35 IAC 201.403(a), the Permittee is not subject to the requirements of 35 IAC Part 201 Subpart L for opacity monitoring because the Permittee conducts opacity monitoring of the affected boilers consistent with Performance Specification 1 in Appendix B to 40 CFR Part 60, as specified at 40 CFR 75.14 of the federal Acid Rain Program.
- c. The affected boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for SO₂ and NO_x Acid Rain Requirements, because the affected boilers are subject to Acid Rain Program requirements, pursuant to 40 CFR 64.2(b)(1)(iii).
- d. The affected boilers are not subject to 40 CFR Part 64, CAM for SO₂ (Condition 7.1.4(c)) and NO_x (Condition 7.1.4(f)), pursuant to 40 CFR 64.2(b)(1)(vi), because this CAAPP permit specifies a continuous compliance determination method for these standards.
- e. The affected boilers are not subject to 40 CFR Part 64, CAM for CO (Condition 7.1.4(d)) pursuant to 40 CFR 64.2(a)(2), because the affected boilers do not use an add-on control device to achieve compliance with this standard.
- f. The affected boilers are not subject to 40 CFR Part 64, CAM, for the emission standards for HAPs in 40 CFR 63 Subpart UUUUUU, as addressed in Section 6.5, pursuant to 40 CFR 64.2(b)(1)(i), because these

NESHAP emission standards were proposed by the USEPA after November 15, 1990.

- g. The affected boilers are not subject to 40 CFR Part 64, CAM, for mercury emission standards in 35 IAC Part 225, as addressed in Condition 6.4.4(a), because the mercury emissions of the affected boilers do not meet the applicability criteria in 40 CFR 64.2(a)(3) and, pursuant to 40 CFR 64.2(b)(1)(vi), this CAAPP permit specifies a continuous compliance determination method for this standard.
- h. The affected boilers are not subject to 40 CFR 60 Subpart Da, Standards of Performance for Electric Utility Steam Generating Units, because construction, modification or reconstruction of the boilers did not commence after September 18, 1978.
- i. This permit is based on the affected boilers, at the time of permit issuance, not being subject to 40 CFR 60 Subpart CCCC, Standards of Performance for Commercial and Industrial Solid Waste Incineration Units (CISWI), because the boilers do not serve to combust solid wastes as that term is defined by the USEPA, for the purpose of reducing the volume of waste by removing combustible matter.
- j. The affected boilers are not subject to 40 CFR 63 Subpart DDDDD or JJJJJJ, the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. This is because electric utility steam generating units (EGU) covered by 40 CFR 63 Subpart UUUUU are not subject to 40 CFR 63 Subpart DDDDD or JJJJJJ.
- k. Pursuant to 35 IAC 217.342(c), the affected boilers are not subject to 35 IAC 217 Subpart M, Electrical Generating Units, because the Permittee is complying with 35 IAC 225 Subpart B through the combined pollutant standard. (See Condition 6.5.3)

7.1.6 Work Practices and Operational Limitations

- a. i. As part of its operation and maintenance of the affected boilers, the Permittee shall perform a combustion evaluation on each boiler for each semi-annual period in which the boiler operates, pursuant to Section 39.5(7)(d) of the Act. This evaluation shall consist of process measurements of the concentration of CO in the flue gas of the affected boiler as well as any adjustments

and/or corrective measures undertaken for the combustion systems of the boilers.

- ii. Notwithstanding Condition 7.1.6(a)(i), for a semi-annual period for which the Permittee conducts a tune-up of the EGU burner and combustion controls as specified in Condition 6.6.3(e), such tune-up will fulfill the requirement of Condition 7.1.6(a)(i) for that period.
- iii. Notwithstanding Condition 7.1.6(a)(i), the Permittee may perform the required combustion evaluation for a semi-annual period not later than 30-boiler operating days after the end of the period under the following circumstances:
 - A. If an affected boiler is off-line during the last 30 days of the semi-annual period, or
 - B. If an affected boiler operates for less than 40 days in the semi-annual period.
- b. Pursuant to Permit 10030003, at all times, the Permittee shall, to the extent practicable, maintain and operate the RRI and SNCR systems in a manner consistent with good air pollution control practices for minimizing emissions from the affected boilers and the source. [T1]
- c. Pursuant to Construction Permits 10120020 and 10120021, the DSI systems shall be designed to be able to handle and inject sorbent into the flue gas of the affected boilers at a rate that will achieve up to 90 percent removal of SO₂ in the emissions of the boilers. [T1]
- d. Pursuant to Construction Permits 07060012, 10120020 and 10120021, at all times, the Permittee shall maintain and operate the affected boilers with the ACI systems, DSI systems and other air pollution control equipment in a manner consistent with good air pollution control practice. [T1]

7.1.7-1 Testing Requirements

Pursuant to Section 39.5(7)(d)(ii) of the Act, the Permittee shall have the PM and CO emissions of each affected boiler measured as specified below:

- a. i. Intentionally Blank.
- ii. Intentionally Blank

iii. Periodic PM emission measurements shall be made for the affected boilers within a time period determined from the compliance margin for the applicable PM emission standard, based on the results of the preceding PM measurement, as follows. For this purpose, the compliance margin is the extent to which the actual PM emissions as measured are lower than the applicable PM limit. For example, if the measured PM emissions of the affected boiler are 0.075 lb/mmBtu, the compliance margin for the applicable PM limit, 0.1 lb/mmBtu, would be 25 percent. ($0.100 - 0.075 = 0.025$, $0.025 / 0.100 = 0.25$ or 25 percent)

- A. If the compliance margin is less than 20 percent, within 15 months of the previous measurement.
- B. If the compliance margin is between 20 and 40 percent, within 27 months of the previous measurement.
- C. If the compliance margin is greater than 40 percent, within 39 months of the previous measurement.

Note: In addition to this testing in 7.1.7-1(a)(iii), the Permittee currently performs quarterly PM tests as a compliance demonstration for 40 CFR 63 Subpart UUUUU, MATS. (See Condition 6.5.4(a)(i).)

- iv. Measurements of CO emissions shall be made as follows:
- A. Intentionally Blank
 - B. In conjunction with each measurement of PM emissions made pursuant to Condition 7.1.7-1(a)(iii) (or a RATA for SO₂ or NO_x preceding such measurement), provided, however, that if measured CO emissions are no more than 100 ppm at 50 percent excess air, CO measurements need not be performed with the next PM measurement (or preceding RATA) but shall be performed with the second measurement of PM emissions following the measurement in which CO emissions were no more than 100 ppm (or a RATA preceding that PM measurement).

- v. A. If any alternative fuel identified in Condition 7.1.11-2(a) (i) is burned, the Permittee shall demonstrate compliance with MATS while combusting the alternative fuel using the same compliance method as used for coal. If MATS compliance is demonstrated by emissions testing, the Permittee shall conduct three test runs, in accordance with the most recently submitted test protocol, while combusting the alternative fuel no later than the next scheduled MATS test as required by Condition 6.6.4(a). In addition, the Permittee shall conduct CO (SIP standard in Condition 7.1.4(d)) emissions testing at the common stack while combusting the alternative fuel no later than the next scheduled MATS test as required by Condition 6.6.4(a).
 - B. The Permittee shall conduct such additional testing while firing the alternative fuel or blend of alternative fuels that were fired in the boilers during the quarter at the maximum rate at which the systems that feed alternative fuel(s) to the boilers are operated or if the alternative fuel(s) are mixed with the coal, the maximum rate at which alternative fuel(s) were mixed with the coal fired in the boilers. Further testing shall be conducted at least every five years, unless use of alternative fuel(s) has been discontinued, or if the maximum rate for use of alternative fuel(s) by the boilers increases.
- vi. Measurements of PM and CO emissions shall be made within 90 days (or such later date set by the Illinois EPA) following a request by the Illinois EPA for such measurements.
- b. i. The Permittee shall operate each affected boiler at maximum normal operating load conditions during each performance test. Maximum normal operating load will be generally between 90 and 110 percent of design capacity but should be representative of unit specific normal operations during each test run, pursuant to 39.5(7) (c) and consistent with 40 CFR 63.10007(a) (2). In addition, the Permittee may perform

measurements at other operating conditions to evaluate variation in emissions.

- ii. Measurements shall be taken at an appropriate location in the stack associated with the affected boilers or another location in the exhaust ductwork of an individual boiler as approved by the Illinois EPA. If both boilers are operating, the boilers and their associated controls shall be operated in a similar manner while measurements are being performed, so that the results typify both boilers. If the operation of the affected boilers differs significantly, the Permittee may have to perform further measurements or separate measurements for each boiler at the request of the Illinois EPA, in accordance with Condition 7.1.7-1(a).

- iii. A. The following Reference Methods and procedures shall be used for these measurements. Refer to 40 CFR 60, Appendix A for Reference Methods.

Location of Sample Points	Reference Method 1
Gas Flow and Velocity	Reference Method 2
Flue Gas Weight	Reference Method 3
Moisture	Reference Method 4
Particulate Matter (PM)	Reference Method 5
Carbon Monoxide (CO)	Reference Method 10

Other Reference Methods adopted by USEPA may be used in place of the above methods with the approval of the Illinois EPA.

- B. Compliance may be determined from the average of three valid test runs, subject to the limitations and conditions contained in 35 IAC Part 283.
- c. Except for minor deviations in test methods, as defined by 35 IAC 283.130, emission testing shall be conducted in accordance with a test plan prepared by the testing service or the Permittee and submitted to the Illinois EPA for review prior to emission testing, and the conditions, if any, imposed by the Illinois EPA as part of its review and approval of the test plan, pursuant to 35 IAC 283.220 and 283.230.
 - i. The Permittee shall submit this test plan within the time period provided in Condition

- 8.6.2 and the test plan shall include the information specified by Condition 8.6.2.
- ii. Notwithstanding the above, as provided by 35 IAC 283.220(d), the Permittee need not submit a test plan for emission testing that will be conducted in accordance with the procedures used for previous tests accepted by the Illinois EPA or the previous test plan submitted to and approved by the Illinois EPA, provided that the Permittee's notification for testing, as required below, contains the information specified by 35 IAC 283.220 (d) (1)(A), (B) and (C).
- d. The Permittee shall notify the Illinois EPA prior to conducting emission tests to enable the Illinois EPA to observe testing. Notification for the expected test date shall be submitted a minimum of 30 days prior to the expected date of testing. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual test date. The Illinois EPA may on a case-by case basis accept shorter advance notice if it would not interfere with the Illinois EPA's ability to observe testing.
 - e. The Permittee shall submit the Final Report(s) for any required emission testing to the Illinois EPA within 45 days after the tests results are compiled and finalized but no later than 120 days after the date of testing. The Final Report shall include the information specified in Condition 8.6.3 and the following information:
 - i. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.
 - ii. A description of any minor deviations from the test plan, as provided by 35 IAC 283.230 (a).
 - iii. Detailed description of operating conditions during testing, including:
 - A. Source(s) of fuel and specifications (ash, sulfur and heat content).
 - B. Boiler operating information, i.e., firing rate of the affected boiler(s) (mmBtu/hr), composition of fuel as burned (ash, sulfur and heat content),

and fuel blending ratio (percent), if a blend of fuels is burned.

- C. Combustion system information, i.e., level of excess air in the flue gas, and levels of CO, CO₂ or O₂ in the flue gas.
 - D. Control equipment operating parameters during testing.
 - E. Load during testing (gross megawatt output and steam flow).
 - F. Information on the usage of alternative fuel during testing, if testing was conducted to satisfy Condition 7.1.7-1(a) (v).
- iv. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
 - v. The SO₂, NO_x, O₂ or CO₂, (hourly averages) and opacity data (6-minute averages) measured by the certified continuous emissions or opacity monitors during testing.

7.1.7-2 Emission Testing Requirements

- a. In conjunction with the quarterly testing for particulate matter emissions conducted by the Permittee pursuant to 40 CFR 63 Subpart UUUUU, as addressed by Condition 6.6.4(a) (i), the Permittee shall also have testing conducted, as follows, to further address the emissions of the affected boilers with the dry sorbent injection systems. This testing may be conducted either for Unit 5 or Unit 6 by themselves or for the combination of Units 5 and 6, in which case such testing may serve to address testing requirements for both Units 5 and 6.
 - i. The timing of testing to address Boilers 5 and 52 (Unit 5) shall be as follows:
 - A. Testing shall first be conducted no later than the fourth quarterly test required by Subpart UUUUU following initial startup of Boilers 51 and 52 with dry sorbent injection.
 - B. Testing shall then be conducted two more times, with such testing

conducted no sooner than the third quarterly test and no later than the sixth quarterly test required by Subpart UUUUU after the previous testing.

- ii. The timing of testing to address Boilers 61 and 62 (Unit 6) shall be as follows:
 - A. Testing shall be conducted no later than the fourth quarterly test required by Subpart UUUUU following the completion of the second phase of construction of the dry sorbent handling facility for Unit 6.
 - B. Testing shall then be conducted no sooner than the third quarterly test and no later than the sixth quarterly test required by Subpart UUUUU after the above testing.
- iii. Testing for emissions of condensable particulate shall be conducted using USEPA Reference Method 202.
- iv. Prior to carrying out these tests, the Illinois EPA's Regional Office and Source Emission Test Specialist shall be notified a minimum of 30 days prior to the expected date of these tests and further notified a minimum of 5 working days prior to the tests of the exact date, time and place of these tests, to enable the Illinois EPA to witness these tests. This notification shall specify that this testing would be intended to satisfy requirements of this permit and explain whether testing is planned for Unit 5 by itself or is planned for the combination of Units 5 and 6.
- v. The following information shall be submitted in or accompanying the Final Report(s) for these tests required by 40 CFR 63 Subpart UUUUU:
 - A. The gross power generation and the steam generation rate, including the key operating data for Unit 6 or Unit 5 and 6 during the test.
 - B. Significant operating parameters of the affected systems and the existing ACI systems, including injection rates

for each sorbent material during the period of testing.

- C. Significant operating parameters of the ESPs, including voltages, current flows and spark rates during the period of testing.
 - D. SO₂ emission data during the periods of testing based on emission monitoring, and the calculated SO₂ control efficiency on a daily basis.
 - E. Opacity data collected by the continuous opacity monitoring systems during each test run, on a minute-by-minute and hourly average basis, and, if conditions are suitable for such observation, observations of opacity at the stack (two 6-minute averages) for each test run.
- b. Notwithstanding Condition 7.1.7-2(a), if the Permittee begins continuous monitoring for particulate matter on Units 5 and 6 pursuant to 40 CFR 63 Subpart UUUUU before the emission testing required by Condition 7.1.7-2(a) is completed, the Permittee need only conduct the last test that is required by Condition 7.1.7-2(a). In addition, this testing shall also include measurements for filterable particulate matter by USEPA Reference Method 5 as well as measurements for condensable particulate matter.

7.1.B. Monitoring Requirements

- a. Pursuant to 40 CFR 75.14 and Section 39.5(7) (d) (iii) of the Act, the Permittee shall install, operate, calibrate and maintain continuous monitoring equipment for the measurement of opacity from the affected boilers. For this purpose, a "shared" monitoring system may be operated at a location in the stack that is common to the affected boilers.
 - i. The Permittee shall operate this equipment in accordance with the general provisions for opacity monitoring systems in 40 CFR 75.10.
 - ii. These monitors shall be the primary basis for reporting of exceedances of Condition 7.1.4(a). (See Conditions 7.1.10-2(a) and 7.1.10-3(a).)

- b. Pursuant to 40 CFR 75.11 and Section 39.5(7) (d) (iii) of the Act, the Permittee shall install, operate, calibrate and maintain a continuous emission monitoring system (CEMS) for the measurement of SO₂ emissions from the affected boilers.
 - i. This CEMS shall be used to demonstrate compliance with the limit in Condition 7.1.4(c) based on the average hourly SO₂ emission rate determined from monitored data from three-hour block averaging periods.
- c. Pursuant to 40 CFR 75.12, 35 IAC 217.710(a), and Section 39.5(7) (d) (iii) of the Act, the Permittee, shall install, calibrate, maintain and operate a CEMS for the measurement of NO_x emissions from the affected boilers, in accordance with the requirements of 40 CFR 75 Subpart B.
- d. Pursuant to Section 412 of the Clean Air Act and 40 CFR Part 75, the source is required to operate continuous monitors for the affected boilers for various parameters, including SO₂, NO_x, volumetric flow and opacity, along with a computerized data acquisition and handling system for collected data. (See also Condition 6.2.3) To the extent that applicable performance specifications and operating requirements for monitoring under 40 CFR Part 75 are inconsistent with the above requirements for monitoring, the procedures of 40 CFR Part 75 shall take precedence. (See also Condition 8.2.)
- e. Compliance Assurance Monitoring (CAM) Requirements

The affected boilers are subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for PM for the standard set forth in Condition 7.1.4(b) as addressed in Condition 7.1.13-2.
- f. Pursuant to Construction Permit 07060012, the Permittee shall operate, and maintain instrumentation for measuring rate of ACI injected for each affected boiler with the status of the system. [T1]
- g. Pursuant to Permit 10030003, if the operation or rate of reagent injection of RRI or SNCR systems can be adjusted remotely by personnel in the control room, the Permittee shall install, operate, and maintain instrumentation for the status of the RRI system and the rate of reagent injection, respectively. [T1]

- h. Pursuant to Construction Permits 10120020 and 10120021, the Permittee shall operate and maintain instrumentation on each DSI system for sorbent injection rates, by volume or mass, which may either be measured directly or indirectly, e.g., by measuring feeder speed. [T1]
- i. Pursuant to 35 IAC 214.604(b), the Permittee must calibrate, maintain and operate a continuous emissions monitoring system for the measurement of SO₂ emissions in accordance with 35 IAC 214.604(d) and Condition 7.1.8(b).

7.1.9 Recordkeeping Requirements

a. Operational Records for the Affected Boilers

Pursuant to Sections 39.5(7) (a) and (e) of the Act, the Permittee shall maintain the following operating records for the affected boilers:

- i.
 - A. Load (in terms of either gross megawatts output or steam flow) on an hourly basis for each affected boiler or unit.
 - B. If the Permittee is relying on data for heat input for purposes of compliance with Condition 7.1.4(b) that is different from that recorded pursuant to the federal Acid Rain Program, records of heat input (mmBtu, on an hourly basis) or the conversion factors that the Permittee relies upon to convert from boiler load as recorded above to hourly heat input.
- ii. Records for each day when an alternative fuel (i.e., a fuel material other than coal, gas or oil) was burned, including the estimated amount of each such material burned and the affected boiler(s) in which it was burned.
- iii. Total operating hours (hours/quarter) for each affected boiler.
- iv.
 - A. Amount of coal consumed (tons/quarter).
 - B. Amount of each alternative fuel consumed (tons, gallons, cubic feet per quarter, as appropriate).
- v.
 - A. Records of agreements with suppliers of alternative fuel(s), including origin of

material, specifications for heat and ash content, and representative data for elemental composition of such material, including mercury and other heavy metals, chlorine and fluorine.

- B. Records for each load of such fuel(s) received at the source, which at a minimum shall include date, supplier name, type of fuel and amount (tons).
- vi. An operating log, maintenance and repair log, or other records for each affected boiler documenting the performance of the combustion evaluation required by Condition 7.1.6(a), including the date of the evaluation, the concentrations of CO measured at the start and conclusion of the evaluation, and a description of any adjustments and/or corrective measures undertaken for the combustion systems of the boiler.
- b. Records for Control Equipment

Pursuant to Sections 39.5(7) (a) and (e) of the Act, the Permittee shall maintain the following records for the air pollution control equipment on the affected boilers:

- i. Maintenance and Repair Log

A maintenance and repair log for each control device, which shall list the activities performed, with date and description. (See also Condition 9.6.1, Control Equipment Maintenance Records.)

- ii. Operating Records for ESPs

When the affected boiler served by the ESP is in operation:

- A. The status of each field in the ESP shall be recorded at least once per shift.
- B. The following numerical data shall be recorded at least once per day: (1) Primary voltages and currents, (2) Secondary voltages and currents and (3) Sparking rates.

- iii. Records for RRI and SNCR Systems

Operating records for the system that, at a minimum, identify the reagent that is being used (e.g., concentration of urea in the urea solution), the setting(s) for reagent injection rate, and each period of time when the affected boiler was in operation (other than startup or shutdown) when the system was not operated, with explanation, e.g., the system was out of service for scheduled maintenance.

iv. Records for ACI Systems

Operating records for the system that, at a minimum, identify the sorbent that is being used, the setting(s) for sorbent injection rate and each period of time when an affected boiler was in operation without the system being operated with explanation, e.g., the boiler was being fired on natural gas.

v. Records for the DSI Systems:

A file that contains documentation for the design of the DSI systems confirming compliance with Condition 7.1.6(c).

c. Records for Continuous Opacity Monitoring Systems

Pursuant to Section 39.5(7)(e) of the Act, the Permittee shall maintain records for the opacity monitoring system at the common stack of the affected boilers required by Condition 7.1.8(a) that as a minimum shall include the following:

- i. Operating records for each opacity monitoring system, including:
 - A. Opacity measurements (6-minute, one-hour, and three-hour block averages).
 - B. Performance testing measurements and evaluations, calibration checks and other quality assurance/control activities.
 - C. Maintenance and adjustment performed.
 - D. Periods other than performance of quality assurance, calibration, and maintenance, as addressed above, when the monitor was inoperative, with reason,

- E. Quarterly reports submitted in accordance with Condition 7.1.10-2(a) and (d).
- ii. Records to address compliance with Condition 5.2.2(b), including:
 - A. Each period when the opacity exceeded 30 percent on a 6-minute block average with date, time, whether it occurred during startup, malfunction, breakdown, or shutdown, and further explanation of the incident.
- d. Records for Continuous SO₂ Monitoring Systems

'Pursuant to Section 39.5(7)(e) of the Act, the Permittee shall maintain records for the SO₂ CEMS on the affected boilers required by Condition 7.1.8(b) that as a minimum shall include: .

 - i. Operating records for the SO₂ CEMS, including:
 - A. SO₂ emission data in the units of the applicable standards (lb/hour and lb/mmBtu).
 - B. Performance testing measurements and evaluations, calibration checks, and other quality assurance/control activities.
 - C. Maintenance and adjustments performed.
 - D. Periods when the SO₂ CEMS was inoperative, with date, time and reason.
 - E. Data reduction information.
 - F. Quarterly reports submitted in accordance with Condition 7.1.10-2(a).
 - ii. Records to verify compliance with the limitation of Condition 7.1.4(c), including:
 - A. SO₂ emissions in the terms of the applicable standard (lb/hour and lb/mmBtu) from the affected boilers on an hourly basis, as derived from the data obtained by the SO₂ CEMS.
 - iii. Pursuant to 35 IAC 214.605(b), the Permittee must keep and maintain records that

demonstrate ongoing compliance with the applicable requirements of 35 IAC 214 Subpart AA. These records must include the applicable information identified in 35 IAC 214.605(b) (1) through (7).

e. Records for Continuous NO_x Monitoring

Pursuant to Section 39.5(7) (e) of the Act and 35 IAC 217.712(a), the Permittee shall maintain records for the NO_x CEMS on the affected boilers required by Condition 7.1.8(c) in accordance with the applicable recordkeeping requirements of 40 CFR 75, that at a minimum shall include the following:

- i. Operating records for each NO_x CEMS, including:
 - A. NO_x emission data in the units of the applicable standards (lb/mmBtu).
 - B. Performance testing measurements and evaluations, calibration checks, and other quality assurance/control activities.
 - C. Maintenance and adjustments performed.
 - D. Periods when NO_x CEMS was inoperative, with date, time and reason.
 - E. Data reduction information.
 - F. Quarterly reports submitted in accordance with Condition 7.1.10-2(a).
- ii. Records to verify compliance with the limitation of Conditions 7.1.4(f) including:
 - A. NO_x emissions in the terms of the applicable standard (lb/mmBtu) from the affected boilers on an hourly basis, as derived from the data obtained by the NO_x CEMS.

f. Acid Rain Program

Records for the continuous emission monitoring required for the affected boilers by the Acid Rain Program should be kept by the source in accordance with 40 CFR Part 75, including the General Recordkeeping Provisions; the General Recordkeeping Provisions for Specific Situations, if applicable;

and Certification, Quality Assurance and Quality Control Record Provisions [See Condition 6.2.3].

g. Records for Startups of Affected Boilers, pursuant to Section 39.5(7) (b) of the Act

i. The Permittee shall maintain written startup procedures for each affected boiler, as required by Condition 7.1.3(b)(ii).

ii. The Permittee shall maintain the following records related to startups of the affected boilers:

A. For all startups on each affected boiler.

I. Date, time and duration of the startup.

II. A description of the startup, the reason(s) for the startup, and an indication of whether or not written startup procedures were followed. If any procedures were not followed, the records shall include any departures from established procedures and the reason the procedure could not be followed.

B. For each startup of an affected boiler where emissions in excess of a relevant standard occurred during startup or the Permittee believes that compliance with the PM standard likely was not maintained during the startup, maintain the following additional records for such startup.

I. An explanation of the nature of such exceedance(s), including the qualitative or, if available, quantitative magnitude of such excess emissions.

II. A description of the actions taken or to be taken to minimize the magnitude and duration of any excess emissions.

III. An explanation whether similar incidents could be prevented in the future and if so, a description of

the actions taken or to be taken to prevent similar incidents in the future.

- C. Maintain the following additional records for each startup with a duration exceeding either 28 hours, for the first boiler startup at an EGU, or 8 hours, for a second boiler startup at that same EGU. For purposes of this condition, the duration of the first boiler startup is measured from the initial firing of fuel in that boiler to stable operation of the corresponding EGU at load, and the duration of the second boiler startup is measured from the initial firing of fuel in that boiler until that boiler has both achieved stable operation and has been released for dispatch.

- I. A description of the events that led up to the extended startup duration.
- II. The reason(s) for the extended startup duration.
- III. The actions taken to minimize emissions and the duration of the startup.
- IV. An explanation whether similar incidents might be prevented in the future and if so, the corrective actions taken or to be taken to prevent similar incidents.

h. Records for Continued Operation During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7) (a) and (e) of the Act, the Permittee shall maintain the following records related to malfunction and breakdown for the affected boilers:

- i. Maintenance and repair records for the affected boilers that, at a minimum, address aspects or components of the boilers for which malfunction or breakdown has resulted in excess emissions, which shall list the activities performed on such aspects or components, with date, description and reason for the activity. In addition, in

the maintenance and repair log(s) for control equipment required by Condition 7.1.9(b)(i), the Permittee shall also list the reason for the activities that are performed.

- ii. Records for each incident when operation of an affected boiler continued with excess opacity or emissions during malfunction or breakdown as addressed by Condition 7.1.3(c), that shall include the following information:
 - A. Date, time, duration (i.e., the length of time during which operation continued with excess opacity or emissions until corrective actions were taken or the boiler was taken out of service), and description of the incident.
 - B. The corrective actions used to reduce the quantity of emissions and to reduce the duration of the incident.
 - C. Confirmation of fulfillment of the requirements of Condition 7.1.10-3(a), as applicable, including copies of any follow-up reports submitted pursuant to Condition 7.1.10-3(a) (ii).
 - D. If opacity during the incident exceeded the applicable standard for two or more hours, emissions exceeded an applicable hourly standard, as listed in Condition 7.1.4, or the Permittee believes that compliance with the PM standard likely was not maintained:
 - I. A detailed explanation of:
 - (1) Why continued operation of the affected boiler was necessary, and
 - (2) The probable cause of the incident.
 - II. The preventative measures that have been or will be taken to prevent similar incidents or reduce their frequency and severity, including any repairs to the affected boilers and associated equipment and any

changes to operating and maintenance procedures.

- E. If PM emissions during the incident exceeded an applicable hourly standard, as listed in Condition 7.1.4, or the Permittee believes that compliance with the PM standard likely was not maintained, estimates of the magnitude of emissions of PM during the incident, with magnitude estimated on a qualitative or, if available, quantitative basis.
- F. If CO emissions during the incident exceeded an applicable hourly standard, as listed in Condition 7.1.4, estimates of the magnitude of emissions of CO during the incident, with magnitude estimated on a qualitative or, if available, quantitative basis.

7.1.10-1 Reporting Requirements - Reporting of Deviations

- a. For each affected boiler, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as specified below. These notifications shall include a description of such deviations, including whether they occurred during startup or malfunction/breakdown, and a discussion of the probable cause of such deviations, any corrective actions taken, and any preventative measures taken [Section 39.5(7)(f)(ii) of the Act].
 - i. For those breakdown or malfunction PM or opacity events that require notification and reporting pursuant to Condition 7.1.10-3(a), notification and reporting shall be provided pursuant to Condition 7.1.10-3(a) rather than 7.1.10-2(d).
 - ii. Notification with the quarterly or annual reports required by Conditions 7.1.10-2(b), (c), (d) and (e) for deviations from Conditions 7.1.4(a), (b), (c) and (f) and from the requirements of Condition 7.1.8 for emissions monitoring, unless notification and reporting for that deviation is required pursuant to Condition 7.1.10-3(a).
 - iii. Notification with the quarterly reports required by Condition 7.1.10-2(a) for deviations from the work practice requirements and recordkeeping requirements.

b. Periodic Reporting of Deviations

The quarterly reports required by Condition 7.1.10-2(a) shall include the following information for the affected boilers related to deviations from permit requirements during the quarter [Sections 39.5(7) (a) and (f) (i) of the Act].

- i. A listing of all notifications and reports for instances of deviations that have been provided in writing to the Illinois EPA pursuant to Condition 7.1.10-3(a). For this purpose, the Permittee need not resubmit copies of these previous notifications or reports but may elect to supplement such material.
- ii. Detailed information, as required by Condition 7.1.10-1(a) (ii) or (iii), for all other deviations not addressed in the above listing.

7.1.10-2 Reporting Requirements - Regular Reports

a. Quarterly Reports

In place of the semi-annual monitoring reports otherwise required by Condition 8.6.1, the Permittee shall submit quarterly reports to the Illinois EPA pursuant to Sections 39.5(7) (a) and (f) of the Act.

- i. These reports shall include the following information for operation of the affected boilers during the quarter:
 - A. The total operating hours for each affected boiler, as also reported in accordance with 40 CFR Part 75.
 - B. The maximum hourly load achieved by each affected boiler or unit (steam flow, gross megawatts, or heat input).
 - C. A discussion of significant changes in the fuel supply to the affected boilers, if any, including changes in the source of coal, the introduction of new fuel materials other than coal, gas and oil, and changes in the source of such other fuel materials or the maximum rate at which they will be fired.

- D. The amounts of coal and each alternative fuel, if any, used in each calendar month.
 - E. A list of the startups of each affected boiler, including the date, duration and description of each startup, accompanied by a copy of the records maintained pursuant to Condition 7.1.9(g)(ii) (C) for each startup for which such records were required.
- ii. These reports shall include the information specified in Conditions 7.1.10-2(b), (c), and (d) for SO₂, NO_x, and PM emissions and opacity from the affected boilers during the quarter and for the operation of required continuous monitoring systems during the quarter.
 - iii. A. These reports shall be submitted after the end of every calendar quarter as follows:

<u>Monitoring Period</u>	<u>Submittal Deadline</u>
January - March	May 15
April - June	August 15
July - September	November 15
October - December	February 15

b. Reporting of SO₂ Emissions

Pursuant to Sections 39.5(7) (a) and (f) of the Act, the Permittee shall report the following information for the affected boilers to the Illinois EPA with its quarterly reports pursuant to Condition 7.1.10-2(a):

- i. Summary information on the performance of the SO₂ CEMS, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the SO₂ CEMS was not inoperative, repaired or adjusted, such information shall be stated in the report as specified by 40 CFR 60.7(c) (4).
- ii. If specifically requested by the Illinois EPA or the CEMS downtime was more than 5 percent of the total operating time for the affected boilers: the date and time identifying each period during which the CEMS was inoperative except for zero and span checks, and the nature of CEMS repairs or adjustments and a summary of quality assurance data consistent with 40 CFR Part

75, i.e., the dates and results of the Linearity Test(s) and any Relative Accuracy Test Audit(s) during the quarter, a listing of any days when a required daily calibration was not performed, and the date and duration of any periods when the CEMS was "out-of-control" as addressed by 40 CFR 75.24.

iii. The following information for each period when SO₂ emissions were in excess of the limitation in Condition 7.1.4(c)*. When there were no such exceedances, this shall be stated in the report.

- A. The starting date and time of the SO₂ excess emissions.
- B. The duration of the excess emissions.
- C. The one-hour and three-hour average (lb/hour) for each three-hour block of excess emissions.
- D. A detailed explanation of the cause of the excess emissions if known, including whether such excess emissions occurred during startup, malfunction or breakdown of a boiler.
- E. A detailed explanation of any corrective actions taken.

* For SO₂ emissions, the averaging period is a three-hour block average, as used to determine compliance with the limitations of Condition 7.1.4(c). The records for excess emissions shall consist of three-hour block emission averages during which the limitation was exceeded.

c. Reporting of NO_x Emissions

Pursuant to Sections 39.5(7) (a) and (f) of the Act, the Permittee shall report the following information for the affected boilers to the Illinois EPA with its quarterly reports pursuant to Condition 7.1.10-2(a):

- i. Summary information on the performance of the NO_x CEMS, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the NO_x CEMS was not

inoperative, repaired or adjusted, such information shall be stated in the report as specified by 40 CFR 60.7(c)(4).

- ii. If specifically requested by the Illinois EPA or the CEMS downtime was more than 5 percent of the total operating time for the affected boilers: the date and time identifying each period during which the CEMS was inoperative except for zero and span checks, and the nature of CEMS repairs or adjustments and a summary of quality assurance data consistent with 40 CFR Part 75, i.e., the dates and results of the Linearity Test(s) and any Relative Accuracy Test Audit(s) during the quarter, a listing of any days when a required daily calibration was not performed, and the date and duration of any periods when the CEMS was "out-of-control" as addressed by 40 CFR 75.24.

d. Reporting Related to Opacity and PM Emissions

Pursuant to Sections 39.5(7)(b) and (f) of the Act, the Permittee shall report the following information for the affected boilers to the Illinois EPA with its quarterly reports pursuant to Condition 7.1.10-2(a):

- i. Information on the performance of the opacity monitoring system and excess emissions, as required for a "Summary Report" specified by 40 CFR 60.7(d). When no excess opacity occurred or the continuous opacity monitoring system has not been inoperative, repaired or adjusted, such information shall be stated in the report as specified by 40 CFR 60.7(c)(4).
- ii. If the total duration of excess opacity during the calendar quarter is 1 percent or greater of the total operating time for an affected boiler during the quarter or if the opacity monitoring system downtime was more than 5 percent of the total operating time for an affected boiler during the quarter then, in addition to the "Summary Report" required by Condition 7.1.10-2(d)(i) and the information required by Condition 7.1.10-2(d)(iii), the quarterly report must include:

- A. The total operating time of the affected boiler; and
 - B. The operating status of the opacity monitoring system, including the dates and times of any periods during which it was inoperative.
- iii. The following information for each period when opacity was in excess of the limitation in Condition 7.1.4(a).
- A. A summary of information for each period of excess opacity that includes:
 - I. The starting date and time of the excess opacity.
 - II. The duration of the excess opacity.
 - III. The magnitude of excess opacity, based on six-minute average opacity, including:
 - 1. The percent opacity for each six-minute period in excess of the limitation.
 - 2. The start time of each six-minute period in excess of the limitation.
 - IV. The cause of excess opacity, if known, including whether such excess opacity occurred during startup, malfunction or breakdown of a boiler.
 - V. Any corrective actions taken.
 - VI. Identification of any previous report for the incidents during the quarter submitted to the Illinois EPA pursuant to Condition 7.1.10-3(a)(ii). For this purpose, the Permittee need not resubmit copies of such report but may elect to supplement such material.
 - VII. Information required by Conditions 7.1.9(h)(ii)(A), (B) and (D)(I) for incidents when operation of an affected boiler continued during malfunction or breakdown with

excess opacity that are not addressed by individual reports submitted pursuant to Condition 7.1.10-3(a)(ii).

Note: Because the Permittee is reporting in accordance with the requirements of the NSPS, 40 CFR 60.7(c) and (d) for an affected boiler for opacity, pursuant to the federal Acid Rain Program, as included above, the Permittee is not subject to reporting pursuant to 35 IAC 201.405 [35 IAC 201.403(a)].

- iv. The following information for periods when PM emissions were in excess of the limitation in Condition 7.1.4(b). If there were no such periods of excess emissions during the reporting period, the quarterly report shall so state.
 - A. A summary of information for each period of excess emissions that includes:
 - I. The starting date and time of the excess emissions.
 - II. The duration of the excess emissions.
 - III. The qualitative or, if available, quantitative magnitude of the excess emissions.
 - IV. The means by which the excess emissions were indicated or identified, if other than the level of opacity.
 - V. A detailed explanation of the cause of the excess emissions if known, including whether such excess emissions occurred during startup, malfunction or breakdown.
 - VI. A detailed explanation of any corrective actions taken.
 - VII. Identification of the previous reports for the incidents submitted to the Illinois EPA pursuant to Condition 7.1.10-3(a)(ii), if any. For this purpose, the Permittee

need not resubmit copies of such report but may elect to supplement such material.

- v. The following further information related to opacity exceedances or groups of opacity exceedances during the quarter that resulted from the same or similar cause(s):
 - A. For opacity exceedances or groups of exceedances with "recurring" cause(s) (i.e., cause(s) that also resulted in exceedance(s) during the previous quarter): an explanation of any particular circumstances or factors during the current quarter that affected the number or magnitude of such exceedances; a discussion of any changes in the corrective actions taken in response to such exceedances during the current quarter as compared to the previous quarter; and a discussion of any additional preventative measures that were taken during the current quarter to reduce the number or magnitude of exceedance(s).
 - B. For opacity exceedances or groups of exceedances with "new" cause(s) (i.e., cause(s) that did not result in opacity exceedance(s) during the previous quarter): an explanation of the cause(s) or probable cause(s) of such exceedance(s), to the extent known; a discussion of any particular circumstances or factors during the quarter that resulted in such exceedance(s); the corrective action(s) taken, if any, with explanation of how those action(s) functioned to end the exceedance(s); and a discussion of any preventative measures taken to reduce the number or magnitude of exceedance(s).
- vi. A glossary of specialized technical terms commonly used by the Permittee in its reports pursuant to this Condition 7.1.10-2(d).
- e. Reporting of NO_x Emissions for the Ozone Control Period

The Permittee shall submit a report to the Illinois EPA by November 30 of each year that demonstrates whether the affected boilers have complied with Condition 7.1.4(f), pursuant to 35 IAC 217.712(d) and (e).

- i. If the Permittee is demonstrating compliance on a unit specific basis with Condition 7.1.4(f)(i)(A), this report shall contain the information specified by 35 IAC 217.712(d) including the heat input and NO_x emissions of the units for the ozone control period.
- ii. If the Permittee is demonstrating compliance by means of "NO_x averaging" as authorized by Condition 7.1.4(f)(ii)(B), this report shall contain the information specified by 35 IAC 217.712(e) and other related information as follows:
 - A. In all cases, for each affected boiler covered by this permit that is participating in a NO_x average demonstration, the Permittee shall report the following:
 - I. Identification of the other EGUs that are participating in the demonstration, including identification of the source that is the lead party for the demonstration and that is also taking responsibility for submitting the information required by Condition 7.1.10-2(e)(ii)(B) below.
 - II. A statement confirming that the unit is eligible to participate in an averaging demonstration, i.e., the unit is included in only one demonstration [35 IAC 217.708(d)] and the Permittee is complying with applicable recordkeeping and reporting requirements for the unit, pursuant to 35 IAC 217.708(c) and (g).
 - III. The average NO_x emission rate for the unit, with calculations and supporting information, as required by 35 IAC 217.712(e)(2) and (3), including the heat input and NO_x

emissions of the unit for the ozone control period.

IV. A statement whether the unit would show compliance on their own in the absence of averaging.

B. If the Permittee is the lead party for a NO_x averaging demonstration that includes units operated by other companies, the Permittee shall report the following:

I. Copies of the information provided by other parties to the lead party for the EGU participating in the demonstration, which include all material required by Condition 7.1.10-2(e)(ii)(A) above (unless or except as this information is provided with the submittal by a person who is a responsible official for the EGU participating in the demonstration).

II. The averaged NO_x emission rate for all EGUs participating in the demonstration, with complete supporting calculations, as required by 35 IAC 217.712(e) (1).

III. A statement whether the demonstration shows compliance.

f. Submittal of Supplemental Information Related to NO_x Emissions during the Ozone Control Period

The Permittee shall submit copies of any records and data required by 35 IAC 217.712 to the Illinois EPA within 30 days after receipt of a written request by the Illinois EPA [35 IAC 217.712(g)].

g. Acid Rain Program Reporting

Pursuant to Section 412 of the Clean Air Act and 40 CFR Parts 72 and 75, the source is subject to the reporting requirements of 40 CFR Part 75, which includes General Provisions; Notifications; Initial Certification or Recertification Application; Quarterly Reports; and Opacity Reports [See Condition 6.2.3]. Pursuant to Section 39.5(17) (m) of the Act, upon request by the Illinois EPA, the designated representative of the source must concurrently submit to the Illinois EPA in the same electronic format specified by the USEPA, the data

and information submitted to USEPA on a quarterly basis pursuant to 40 CFR 75.64.

7.1.10-3 Reporting Requirements - Notifications

a. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7) (a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA for incidents when operation of an affected boiler continued with excess emissions or excess opacity during malfunction or breakdown as addressed by Condition 7.1.3(c). These requirements do not apply to such excess emissions, if any, that occur during startup or shutdown of the affected boiler.

- i. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile, or electronic mail, for each incident in which the opacity from an affected boiler exceeds 30 percent for eight or more 6-minute averaging periods within a two-hour period unless the Permittee has begun the shutdown of the affected boiler by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods within a two-hour period, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.1.10-2(d).)
- ii. Upon conclusion of each incident in which the applicable PM emission standard was exceeded or in which an exceedance of the opacity standard was two hours or more in duration, the Permittee shall submit a follow-up report to the Illinois EPA, Air Compliance Section, within 15 days providing a copy of the records for the incident required by Condition 7.1.9(h) (ii) (A), (B) and (D).

- b. Pursuant to Construction Permits 10120020 and 10120021, the Permittee shall notify the Illinois EPA in advance of using a sorbent other than trona in the affected systems. This notification shall be submitted at least three months in advance if possible or otherwise promptly after the Permittee learns that an alternative sorbent will need to be used. This notification shall identify the alternative sorbent and include an explanation of

the reason for use of an alternate sorbent, the expected duration for use of the alternative sorbent (if temporary), and the expected changes in sorbent injection rates. [T1]

- c. Pursuant to 35 IAC 214.605, the Permittee must submit to the Illinois EPA a certification that the source will be in compliance with the provisions in 35 IAC 214 Subpart AA by January 1, 2017. The certification must contain the applicable information identified in 35 IAC 214.605(a)(3) and (5).
- d. Pursuant to 35 IAC 214.605(e), the Permittee must notify the Illinois EPA within 30 days after discovery of deviations from any of the requirements in 35 IAC 214 Subpart or any exceedance of an emission limitation in Condition 7.1.4(e). At minimum, and in addition to any permitting obligations (See Condition 7.1.10-1), the notification must include a description of the deviations or exceedances, a discussion of the possible cause of the deviations or exceedances, any corrective actions taken, and any preventative measures taken.

7.1.11-1 Anticipated Operating Scenarios/Operating Flexibility

The Permittee is authorized to make the following operational changes with respect to each affected boiler without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7) (a) and (1) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements; to properly obtain a construction permit in a timely manner for any activity constituting construction or modification as defined in 35 IAC 201.102 or, as applicable, 40 CFR 52.21(a)(2) or 35 IAC 203.207; and to comply with other legal requirements that apply to such a change:

- a. Operation of additional air pollution control equipment, which is addressed by a separate construction permit.
- b. Burning of coal or a mix of coal from different suppliers.
- c. Burning of used oil generated at the source that does not make up more than 10 percent by weight of the fuel supply to the boiler on a quarterly basis.

7.1.11-2 Requirements Related to Use of Alternative Fuels and Refined Coal

- a. The Permittee is authorized to burn the alternative fuels listed below in conjunction with burning of standard fuels, provided that such materials can be accommodated with the existing fuel handling system and the burners in the affected boilers, and such materials do not make up more than 10 percent by weight of the fuel supply to the boiler on a quarterly basis provided the Permittee complies with the requirements in Conditions 7.1.11-2(a) (i) and (ii) and 8.4.2(e). This authorization does not affect the Permittee's obligation to continue to comply with applicable requirements; to properly obtain a construction permit in a timely manner for any activity constituting construction or modification as defined in 35 IAC 201.102 or, as applicable, 40 CFR 52.21(a) (2) or 35 IAC 203.207; and to comply with other legal requirements that apply to such a change:
 - i. Alternative fuels addressed by this authorization include materials that do not constitute waste and were not generated from municipal waste or hazardous waste, provided that such fuels are shipped to the source in homogeneous form prepared for use as fuel (e.g., a shipment of tire derived fuel). More specifically, such alternative fuels shall be limited to tire-derived fuel (as defined at Section 54.10b of the Act), clean lumber (as defined at 40 CFR 60.2265), petroleum coke, shredded polyethylene agricultural containers and seed corn.
 - ii. At least 7 days prior to burning tire-derived fuel, clean lumber, petroleum coke, shredded polyethylene agricultural containers or seed corn, the Permittee shall submit a written notice to the Illinois EPA demonstrating that the planned combustion of any such alternative fuel will not result in the affected boilers becoming a CISWI unit under 40 CFR 60 Subpart CCCC. Such demonstration shall include, as applicable, a production of records fulfilling the relevant requirements of 40 CFR 60.2175(v).
 - iii. Conduct performance testing as set forth in Condition 7.1.7-1(a) (v).
- b. Pursuant to Section 39.5(7)(a) and (1) of the Act, the Permittee is authorized to burn "refined coal" in the affected boilers (i.e., coal to which dry or liquid additives have been added to reduce emissions of certain pollutants), as addressed by Construction Permit 15090007. This authorization does not alter

applicable requirements for the affected boilers and associated control equipment.

Note: The facility for handling these additives and mixing them with the coal supply for the boilers is addressed in Section 7.10 of this permit.

i. Pursuant to Construction Permit 15090007,

A. The Permittee shall notify the Illinois EPA of the following events within 30 days after the event occurs:

I. Refined coal is first burned in an affected boiler.

II. Use of refined coal by the affected boilers is permanently discontinued.

B. If an initial performance report is prepared for the use of refined coal by the affected boilers, the Permittee shall submit a copy of this report to the Illinois EPA. This report shall include: emissions data for the targeted pollutant(s), i.e., NOx and mercury, gathered during the use of refined coal by the affected boilers, including emissions (pounds per hour and pounds per million Btu) and emissions reduction achieved for each targeted pollutant and the rate of application for each type of fuel additive; and a discussion of the effect of refined coal on emissions of other pollutants from the affected boilers, if any.

Note: For any initial performance report on the use of refined coal prepared by a contractor associated with production of refined coal, the Permittee may submit a copy of such report.

7.1.12 Compliance Procedures

- a. i. Compliance with the opacity limitation of Condition 7.1.4(a) (30 percent opacity) is addressed by the average opacity calculated from 6-minute periods of opacity measurements from the continuous opacity monitoring system operated in accordance with the requirements of Condition 7.1.8(a)

and the relevant recordkeeping requirements of Condition 7.1.9.

- ii. Notwithstanding Condition 7.1.12(a)(i) above, should the Permittee choose to rely on 35 IAC 212.123(b) to allow opacity greater than 30 percent (6-minute average) from the affected boilers, the Permittee shall do the following:
 - A. Maintain records for the affected boilers of short-term opacity data, that is, either a continuous chart recording of measured opacity, a record of discrete observations of opacity taken no more than 15 seconds apart, or a record of 1-minute average opacity data determined from four or more data points equally spaced during each minute period, to determine whether opacity from the boilers exceeded 30 percent opacity.
 - B. Have the capability to review such short-term opacity data for the affected boilers to identify:
 - I. Any hour in which opacity exceeded 30 percent, and then, for such hour: (1) the duration of opacity in excess of 30 percent; (2) whether opacity ever exceeded 60 percent; and (3) whether the duration of opacity in excess of 30 percent was more than 8 minutes in aggregate.
 - II. Whether opacity in excess of 30 percent occurred in more than three hours in a 24-hour period.
 - C. For other emission units at the source, have the ability to review any opacity data required to be collected and kept pursuant to other provisions of this permit and that is representative of such units.
 - D. In the reports required by Condition 7.1.10-2(d), confirm that the relevant short-term opacity data, shows that the terms of 35 IAC 212.123(b) are satisfied, when 35 IAC 212.123(b) is relied upon.

- E. Notify the Illinois EPA with its next quarterly report if it changes the type of short term opacity data that it is collecting pursuant to Condition 7.1.12(a)(ii) (A) for use in conjunction with reliance on 35 IAC 212.123(b).

Note: Because the affected boilers are ducted to a common stack served by a single opacity monitor, the affected boilers must be treated as a single emission unit if the Permittee chooses to rely on 35 IAC 212.123(b).

- b. Compliance with PM emission limitation of Condition 7.1.4(b) is addressed by testing requirements in Condition 7.1.7-1, continuous opacity monitoring in accordance with Condition 7.1.8(e), and the relevant recordkeeping required by Conditions 7.1.9.
- c. Compliance with the SO₂ emission limitation of Condition 7.1.4(c) is addressed by continuous emission monitoring in accordance with Condition 7.1.8(b) and the relevant recordkeeping required by Condition 7.1.9(d).
- d. Compliance with the CO emission limitation of Condition 7.1.4(d) is addressed by the required work practices in Condition 7.1.6(a), emission testing in accordance with Condition 7.1.7-1 and the relevant recordkeeping required by Condition 7.1.9.
- e. Compliance with the NO_x emission limitations of Condition 7.1.4(f) is addressed by the continuous emissions monitoring and relevant recordkeeping required by Conditions 7.1.8(c) and 7.1.9(e).
- f. Compliance with the work practices and operational limitations required by Condition 7.1.6 is addressed by the relevant recordkeeping required by Condition 7.1.9.

Note: This condition is included in this permit pursuant to Section 39.5(7) (p) (v) of the Act.

7.1.13-1 Intentionally Blank

7.1.13-2 Compliance Assurance Monitoring Requirements

- a. Pursuant to 40 CFR 64.7(a), the Permittee shall comply with the CAM requirements in Table 7.1.13a below.

- b. Intentionally Blank
- c. Pursuant to 40 CFR 64.7(a), the Permittee shall comply with the following CAM requirements and the requirements in Condition 7.1.13-2(d) through (g).
 - i. Proper Maintenance and Continued Operation
 - A. Pursuant to 40 CFR 64.7(b), at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
 - B. Pursuant to 40 CFR 64.7(c), except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit (PSEU) is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The Permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
 - ii. Response to Excursions
 - A. Pursuant to 40 CFR 64.7(d)(1), upon detecting an excursion, the Permittee shall restore operation of the PSEU (including the control device and associated capture system) to its normal or usual manner of operation as

expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distributed control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

- B. Pursuant to 40 CFR 64.7(d)(2), determination of whether the Permittee has used acceptable procedures in response to an excursion will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

d. Recordkeeping

Pursuant to 40 CFR 64.9(b)(1), the Permittee shall maintain records of the monitoring data, monitor performance data, corrective actions taken, monitoring equipment maintenance, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under Conditions 7.1.9(c)(i) or 7.1.13-2 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

e. Reporting

Pursuant to Sections 39.5(7)(b) and (f) of the Act, the Permittee shall submit the following as part of

the Quarterly Monitoring Reports required by Condition 7.1.10-2.

i. Summary information on the number, duration, and cause of excursions, and the corrective actions taken, pursuant to 40 CFR 64.6(c)(3), 40 CFR 64.9(a)(2)(i), and Condition 7.1.10-2(d)(iv), except as otherwise provided in 40 CFR Part 64, including 64.7(d).

ii. Summary information on the number, duration, and cause for monitoring equipment downtime incidents, other than downtime associated with calibration checks, pursuant to 40 CFR 64.6(c)(3), 40 CFR 64.9(a)(2)(ii), and Condition 7.1.10-2(d)(i) and (ii).

f. Quality Improvement Plans (QIP)

Pursuant to 40 CFR 64.8, based on the results of any future determination made under 40 CFR 64.7(d)(2), the Administrator or the Illinois EPA may require the Permittee to develop and implement a QIP under separate permit action, as appropriate, under Sections 39.5(14), (15), or (16) of the Act.

g. Need for Improved Monitoring

Pursuant to 40 CFR 64.7(e), if the Permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the Illinois EPA within 30 days of identification and, if necessary, submit to the Illinois EPA a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

Table 7.1.13a CAM Plan for Boilers 51/52 and 61/62 - 35 IAC 212.203

PSEU Designation:		Boilers 51/52 and 61/62 (Common Stack)	
Pollutant:		Particulate Matter (PM) Emissions	
Indicators:	#1) Opacity	#2)	
General Criteria			
The Monitoring Approach Used to Measure the Indicators:	Opacity is measured using a transmissometer. The transmissometer measures the opaqueness of the flue gas exhaust using a beam of light that traverses the stack diameter, which generates an electrical signal that is proportional to the opacity.		
	Opacity less than 30 percent averaged over a rolling 3-hour period is an indicator of proper ESP operation and provides reasonable assurance of meeting the 0.1 lb/mmBtu PM limit.		
	A QIP is not being considered at the time of this CAM Plan submission. Currently, there is no indication of any deficiencies in the monitoring approach selected. The COMs monitoring requirements provide the specific QA/QC procedures for data collection, recordkeeping and reporting for determining "reasonable" assurance of compliance with the applicable PM limitation.		
The Indicator Range Which Provides a Reasonable Assurance of Compliance:			
Quality Improvement Plan (QIP) Threshold Levels:			
Performance Criteria			
The Specifications for Obtaining Representative Data:	The COMS are installed at representative locations in the exhaust stack per 40 CFR Part 60, Appendix B, PS-1 requirements.		
Verification Procedures to Confirm the Operational Status of the Monitoring:	N/A. The COMS were installed and qualified for use to determine compliance with state opacity standards. Verification Procedures are not necessary.		
Quality Assurance and Quality Control (QA/QC) Practices that Ensure the Validity of the Data:	40 CFR Part 60, Appendix B, Performance Specification 1 and 40 CFR Part 75 QA/QC procedures.		
The Monitoring Frequency:	Opacity is measured continuously. Opacity data is reduced in accordance with procedures in 40 CFR 60.13.		
The Data Collection Procedures That Will Be Used:	The three-hour rolling average is calculated and reported in the CEM Data Acquisition System. Alarm set points are established to alert operators of problems.		
The Data Averaging Period for Determining Whether an Excursion Has Occurred:	Rolling 3-hour period.		

7.2 Coal Handling Equipment

7.2.1 Description

The Permittee transfers and stores coal in a series of operations, including railcar unloading, various conveyor belts (with associated hoppers, diverters, and transfer points), storage piles (with stackers and feeders), and silos. These operations first handle coal as supplied by a mine. After crushing, the coal that has been processed at the source by the coal processing equipment (See Section 7.3 of this permit) is fed to the boilers. Particulate matter (PM) emissions from railcar unloading are controlled by a fabric filter or "baghouse." PM emission associated with other operations are controlled by various control measures such as moisture content, dust suppression, enclosures and covers and wet dust extraction devices.

The two static mixers that can be used to mix additives with the coal, which are located on the conveyors that transfer coal from the crusher house to the coal storage bunkers for the boilers, are not addressed in this section of the permit. These mixers are addressed in Section 7.10, as part of the Coal Additive Facility.

Note: The description in Condition 7.2.1 is for informational purposes only and implies no limits or constraints.

7.2.2 List of Emission Units

Coal Unloading by Rail
Coal Transfer Conveyors
Coal Storage Pile
Coal Storage Silos and Surge Bins

7.2.3 Applicability Provisions

- a. i. The "affected operations" for the purpose of these unit-specific conditions are the emission units that are used solely for the purpose of transferring coal or other solid fuel from one location to another or for storage of coal or other solid fuel, without changing the size of the fuel, e.g., by crushing or screening, as described in Conditions 7.2.1 and 7.2.2.
- ii. Certain affected operations, as follows, for which construction, modification or reconstruction commenced after October 24, 1974, but prior to April 28, 2008, are also "affected facilities" for purposes of

the New Source Performance Standards (NSPS) for Coal Preparation Plants, 40 CFR 60 Subpart Y, pursuant to 40 CFR 60.250(a) and 60.251. This is because this source processes more than 200 tons per day of coal by breaking or crushing, as addressed by Section 7.3 of this permit. These affected facilities are subject to applicable requirements of the NSPS, 40 CFR 60 Subpart Y and related requirements in the NSPS, 40 CFR 60 Subpart A, General Provisions.

A. Coal storage systems, i.e., any facility used to store coal except for open storage piles.

B. Coal transfer systems.

Note: See Condition 7.2.4(d) for certain affected operations subject to NSPS 40 CFR Subpart Y.

b. Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected operation in violation of the applicable requirements of Condition 7.2.4(b) (35 IAC 212.123) in the event of a malfunction or breakdown of an affected operation. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

i. This authorization only allows such continued operation as related to the operation of the coal-fired boilers as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.

ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable repair the affected operation, remove the affected operation from service or undertake other action so that excess emissions cease.

- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.2.9(e) and 7.2.10(b). For this purpose, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected operation out of service.
- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.2.4 Applicable Emission Standards

- a. Fugitive emissions, as defined by 35 IAC 211.2490, of the affected operations shall comply with the standard in Condition 5.2.2(a), which generally addresses visible emissions of fugitive particulate matter, pursuant to 35 IAC 212.301.
- b. The affected operations shall comply with the standard, i.e., 30 percent opacity, in Condition 5.2.2(b), which addresses the opacity of the emission of smoke or other particulate matter from the affected operations, pursuant to 35 IAC 212.123.
- c. i. The affected operations shall comply with the applicable standards in Condition 5.2.3, which also address particulate matter emissions from the operations.

- ii. As an affected operation emits fugitive particulate matter, e.g., fugitive emissions from conveyor transfer points, the affected operation shall be addressed by the Permittee in its fugitive particulate matter operating program, as required by Condition 5.2.4, and operated in accordance with such program.
- d. The affected operations that are also affected facilities subject to the NSPS, 40 CFR 60 Subpart Y, i.e., the coal storage silos and surge bins and the coal transfer conveyors controlled by wet dust extractors, shall not discharge into the atmosphere gases which exhibit 20 percent opacity or greater, except during periods of startup, shutdown and malfunction, as defined in 40 CFR 60.2, pursuant to 40 CFR 60.11(c) and 60.254(a).
- e. The affected operations shall comply with 35 IAC 212.321(a): "no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of [35 IAC 212.321]." (See also Attachment 1.) [35 IAC 212.321(a)]
- f. The affected operations shall comply with 35 IAC 212.322(a): "no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of [35 IAC 212.322]." (See also Attachment 1.) [35 IAC 212.322(a)].

7.2.5 Non-Applicability of Regulations of Concern

- a. Intentionally Blank
- b. The affected operations are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM because the affected operations do not have potential pre-control device emissions of the applicable regulated air pollutant

that equals or exceeds major source threshold levels.

7.2.6 Work Practices and Emission Limitations

- a. i. The Permittee shall implement and maintain the control measures for the affected operations, such as enclosure, natural surface moisture, application of dust suppressant, application of water sprays, and use of dust collection devices, for emissions of particulate matter to support the periodic monitoring for the applicable requirements in Conditions 7.2.4, pursuant to Section 39.5(7) (a) of the Act.
- ii. The control measures implemented and maintained shall be identified in and operated in conformance with the "Control Measures Record" required by Condition 7.2.9(b)(i) to satisfy Condition 7.2.6(a) (i), which record is incorporated by reference into this permit by Condition 5.2.9.
- iii. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and use each affected operation that is subject to the NSPS in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or the USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source [40 CFR 60.11(d)].

7.2.7 Opacity Observation and Emission Testing Requirements

- a. i. The Permittee shall have the opacity of the emissions from the affected operations during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7) (d) of the Act.

A. Intentionally Blank

- B. For each affected operation, observations shall be conducted every third year from previous observation.
 - C. Upon written request by the Illinois EPA, such observations shall be conducted for specific affected operation(s) not later than 45 calendar days after the Permittee has received the request or on such later date agreed to by the Illinois EPA.
- ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are each not greater than 10.0 percent.
 - iii.
 - A. For each set of observations required by Conditions 7.2.7(a)(i)(A), (B), and (C), the Permittee shall notify the Illinois EPA at least 7 days in advance of the date of the first observation(s).
 - B. The Permittee shall promptly notify the Illinois EPA of any changes in the date of the first observation(s).
 - iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observation(s), if Illinois EPA personnel are present.
 - v. The Permittee shall submit a written report for these observations not later than 30 days after the date of completion of each set of opacity observations required by Conditions 7.2.7(a)(i)(A), (B), and (C). The report shall include a copy of the current Reference Method 9 certification of each observer and shall identify the observer's current employer. This report shall also include the following for each observation:
 - A. Identification of the affected operation for which observations were conducted.
 - B. Date and time of observations.
 - C. Description of observation condition, including recent weather.

- D. Description of the operating conditions of the affected operations.
 - E. Raw data.
 - F. Opacity determinations.
 - G. Conclusions.
- b. i. Within 90 days after the Permittee has received a written request from the Illinois EPA, the Permittee shall have the PM emissions at the stacks or vents of the affected operations, as specified in such request, measured during representative operating conditions, as set forth below, pursuant to Section 39.5(7) (d) of the Act.
- ii. A. Testing shall be conducted using appropriate Reference Methods, including Reference Method 5 or 17 for PM emissions.
- B. Compliance may be determined from the average of three valid test runs, subject to the limitations and conditions contained in 35 IAC Part 283.
- iii. The Permittee shall submit a test plan as required by Condition 8.6.2.
- iv. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may, at its discretion, accept notification with shorter advance notice provided that the Illinois EPA will not accept such notification if it interferes with the Illinois EPA's ability to observe the testing.
- v. The Permittee shall expeditiously submit a complete Final Report(s) for required emission testing to the Illinois EPA, no later than 90 days after the date of testing. These reports shall include the information specified in Condition 8.6.3 and a detailed description of the operating

conditions of the affected operations during testing, including operating rate (tons/hr) and the control devices being used.

7.2.8 Inspection Requirements

- a. The Permittee shall perform inspections of the affected operations on at least a monthly basis to confirm compliance with the requirements of Condition 7.2.6(a). If an affected operation is not in use during an inspection, this shall be noted in the inspection record. The records required by Condition 7.2.9(d) for these inspections shall be signed off by supervisory or management personnel [Sections 39.5(7)(a) and (d) of the Act].
- b. As part of the inspections of Condition 7.2.8(a), the Permittee shall perform observations of the affected operation(s) for visible emissions in accordance with 35 IAC 212.107 to demonstrate compliance with the requirements of Conditions 7.2.4(b) and (d), unless the Permittee elects to perform Reference Method 9 observations in accordance with Condition 7.2.7(a). These observations may be scheduled so that only a number of affected operations are reviewed during each inspection, provided, however, that all affected operations that are in routine service shall be observed at least once during each calendar year in which it is in use. If visible emissions are observed, the Permittee shall take corrective action within 2 hours to return the status of the operations to no visible emission or shall conduct observations of opacity by Reference Method 9 within one week in accordance with Condition 7.2.7(a). If the Permittee performs Reference Method 9 observations under this Condition 7.2.8(b), such observations are not subject to the notice requirements of Condition 7.2.7(a) (iii) through (v) [Sections 39.5(7) (a) and (d) of the Act].
- c. The Permittee shall perform inspections of the baghouse for the affected operations at least once each calendar year while the operations are out of service, with an initial inspection performed before any maintenance and repair activities are conducted and a follow-up inspection performed after any such activities are completed [Sections 39.5(7) (a) and (d) of the Act].
- d. Pursuant to 39.5(7) (b) and (d) of the Act, the Permittee shall perform a visual survey of the coal storage pile operations as follows:

- i. Coal storage pile operations shall be visually surveyed at least twice per month between May 1st and November 30th of each calendar year.
- ii. Coal storage pile operations shall be visually surveyed on at least a monthly basis at all other times during the calendar year.
- iii. As part of these visual surveys, the Permittee shall perform an observation of the coal storage pile operations for visible emissions in accordance with 35 IAC 212.107 unless the Permittee elects to perform a Reference Method 9 observation. [Sections 39.5(7) (b) and (d) of the Act].
 - A. The overall duration of any observation for visible emissions shall be at least 10 minutes.
 - B. The duration of any Reference Method 9 observation shall be at least 6 minutes.
- iv. If visible emissions from the coal storage pile are observed going beyond the property boundary or the average opacity of the Reference Method 9 observation is greater than 20% at the storage pile, the Permittee shall take action within 2 hours, if necessary, to ensure that fugitive particulate matter emissions do not exceed 30% opacity.
- v. The Permittee shall maintain records of the following for each visual survey:
 - A. Date and time the visual survey was performed and name(s) of personnel performing the visual survey.
 - B. The observed activity and condition of the coal storage pile, including the presence of any visible emissions and the recent weather conditions.
 - C. A summary of any emission control activities performed on the coal storage pile since the last visual survey.
 - D. A description of any action taken if visible emissions were observed crossing the property boundary, including whether action took place within 2 hours of the observation. The record in this Condition

7.2.8(d)(v)(D) shall be signed off by supervisory or management personnel.

7.2.9 Recordkeeping Requirements

The Permittee shall maintain records of the following for the affected operations, pursuant to Sections 39.5(7)(a) and (e) of the Act:

- a. i. Maximum operating capacity of each affected operation (tons/hr).
- ii. Information related to the baghouse associated with the affected operations, including design control efficiency or performance specifications and maximum design particulate matter emissions, gr/dscf, with supporting information, which information shall be kept up to date.
- iii. Maintenance and repair log(s) for the baghouse associated with the affected operations, which log(s) shall list the activities performed on each item of equipment or system, with date and description. (See also Condition 9.6.1, Control Equipment Maintenance Records.)
- b. i. The Permittee shall maintain a record, which shall be kept up to date to reflect any changes that the Permittee may elect to make, that contains the following for each affected operation for which a control measure(s) must be implemented and maintained pursuant to Condition 7.2.6(a)(i).
 - A. The type of emission unit (conveyor, storage pile, etc.) and the Permittee's designation for each emission unit with a description of the emission points on the emission unit;
 - B. Whether the emission unit is considered to be an "affected facility" for purposes of the NSPS, with copies of supporting documentation;
 - C. Description of the primary control measures that are utilized, with a description of the control measure and estimated frequency of application, if not continuous; and

- D. Description of any secondary control measures that would be used based on circumstances (freezing temperatures, recent rain, dry weather, etc.) with identification of the circumstances in which they would be used and whether they would take the place of or supplement the primary control measures.
- ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the control measures identified in the record required by Condition 7.2.9(b) (i) are sufficient to assure compliance with Condition 7.2.4(e) at the maximum process weight rate at which each affected operation can be operated (tons coal/hour), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. This demonstration shall include the information addressed by Condition 7.2.9(a), emission factors for uncontrolled PM emissions, and/or controlled PM emissions published by USEPA or other credible sources.
- iii. Any subsequent revisions to this record related to control measures or affected operations, including their method of operation, shall be submitted not later than 30 days after the date of the revision. Upon request by the Illinois EPA, the Permittee shall submit other relevant information related to the control measures.
- c. The Permittee shall maintain the following operating records:
 - i. The Permittee shall maintain a record of the amount of coal and other solid fuels received at the source, by type of fuel (tons/month and tons/year).
- d. The Permittee shall maintain records of the following for the inspections required by Condition 7.2.8:
 - i. Date and time the inspection was performed, name(s) of inspection personnel, and specific affected operation(s) inspected.
 - ii. The observed condition of the control measures identified in the record required

- by Condition 7.2.9(b)(i) for each inspected affected operation, including the presence of any visible emissions or atypical accumulations of coal fines in the vicinity of the operations.
- iii. A description of any maintenance or repair of equipment associated with the control measures identified in the record required by Condition 7.2.9(b)(i) that is recommended as a result of the inspection and associated work order ticket number(s).
 - iv. A description of any corrective action taken if visible emissions were observed, including whether corrective action took place within 2 hours of the observation and whether the status of the process returned to no visible emissions.
- e. The Permittee shall maintain records of the following for each incident when any affected operation was in use without the control measure(s) required pursuant to the record required by Condition 7.2.9(b)(i) and each incident when an affected operation continued to operate during malfunction or breakdown with excess emissions or excess opacity as addressed by Condition 7.2.3(b):
- i. The date of the incident and identification of the affected operation(s) that was involved.
 - ii. A description of the incident, including the control measures that were not present or operated as required by the record identified in Condition 7.2.9(b)(i); other control measures that were operated, if any; the measures taken to minimize and correct deficiencies with chronology; and an explanation whether the emissions or opacity during the incident exceeded any applicable emission or opacity standard, as listed in Condition 7.2.4.
 - iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.
 - iv. The length of time after the incident was identified that the affected operations continued to operate before the control measures identified in the record required by Condition 7.2.9(b)(i) were in place or

the operations were shut down (to resume operation only after such control measures were in place); an explanation of why continued operation was necessary; and, if this time was more than one hour, an explanation of why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.

- v. The estimated total duration of the incident, i.e., the total length of time that the affected operations ran without the control measure(s) required pursuant to the record required by Condition 7.2.9(b) (i) and the estimated amount of coal handled during the incident.
- vi. A discussion of the probable cause of the incident and any preventative measures taken.
- f. The Permittee shall keep records for all opacity observations made in accordance with Reference Method 9 for the affected operations that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.2.7 (Opacity Observations and Emission Testing Requirements) or otherwise the identity of the observer, a description of the observations that were made, the operating condition of the affected operation(s), the observed opacity, copies of the raw data sheets for the observations, and the reason for the opacity observations, e.g., Reference Method 9 opacity observations required by Condition 7.2.7(a)(i), written request by the Illinois EPA, or any required Reference Method 9 opacity observations following observations of visible emissions under Condition 7.2.8(b).

7.2.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for the affected operations, as follows. Such notifications shall include a description of each deviation and a discussion of the probable cause of deviation, any corrective actions taken, and any preventative

measures taken, pursuant to Section 39.5(7) (f) (ii) of the Act.

- i. For those breakdown or malfunction opacity events that require notification and reporting pursuant to Condition 7.2.10(b)(i), notification and reporting shall be provided pursuant to Condition 7.2.10(b) (i) rather than 7.2.10(a).
- ii. Within 30 days after the conclusion of an incident in which the Permittee continued to operate an affected operation for more than 12 operating hours after discovering that emission control measures required by the record identified in Condition 7.2.9(b) (i) were not present or operating, the Permittee shall submit written notice to the Illinois EPA. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.2.9(e).
- iii.
 - A. Except for events and incidents for which notification or reporting is required by Condition 7.2.10(a)(ii) or 7.2.10(b)(i), as referenced in 7.2.10(a) (i), all other notifications shall be submitted with the quarterly reports required by Condition 7.2.10(b)(ii).
 - B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in prior notifications and reports for such deviations.
- b. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7) (a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA for incidents when operation of affected operation(s) continued with excess emissions or excess opacity during malfunction or breakdown as addressed by Condition 7.2.3(b).

- i.
 - A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by

telephone, facsimile or electronic mail, for each incident in which the opacity from an affected operation exceeds 30 percent for eight or more 6-minute averaging periods within a two-hour period unless the Permittee has begun the shutdown by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.2.10(b) (ii).)

- B. Upon conclusion of each incident that is two hours or more in duration, the Permittee shall submit a written follow-up notice to the Illinois EPA, Air Compliance Section, within 15 days providing a copy of the records for the incident required by Condition 7.2.9(e).

ii. The Permittee shall submit quarterly reports to the Illinois EPA that include the following information for incidents during the quarter in which affected operations continued to operate during malfunction or breakdown with excess emissions or excess opacity. These reports shall be submitted with the quarterly reports submitted for the coal-fired boiler pursuant to Condition 7.1.10-2(a).

- A. A listing of such incidents, in chronological order, that includes:
 - I. The date, time, and duration of each incident;
 - II. The identity of the affected operation(s) involved in the incident; and
 - III. Whether a follow-up notice was submitted for the incident pursuant to Condition 7.2.10(b) (i) (B), with the date of the notice.
- B. A description of the incident, discussion of probable cause of the incident, corrective actions taken, and any preventative measures taken; provided, however, that the Permittee need not resubmit information provided

in a prior report for an incident, as identified above, but may elect to supplement the prior submittal.

- C. The sum duration of all incidents during the quarter.
- D. If there have been no such incidents during the calendar quarter, this shall be stated in the report.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational changes with respect to the affected operations without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7) (a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, or for an activity for which a permit is required pursuant to 35 IAC 201.142.

- a. Handling of solid fuels other than coal.
- b. Operation of additional dust suppressant systems.
- c. Operation of additional dust collection equipment.
- d. Operation of replacement dust suppression systems or dust collection equipment that is of equal or greater effectiveness in controlling visible emissions than the device(s) being replaced, as recognized in a Construction Permit for such system or equipment.

7.2.12 Compliance Procedures

- a. Compliance with Condition 7.2.4 is addressed by the observations, inspections, and recordkeeping required by Conditions 7.2.7(a), 7.2.8, and 7.2.9, respectively.
- b. Compliance with Condition 7.2.6(a) is addressed by the inspections and recordkeeping required by Conditions 7.2.8, and 7.2.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

7.3 Coal Processing Equipment

7.3.1 Description

The Permittee prepares or processes coal for use as fuel in its boilers with crushers that reduce the size of the coal. Associated particulate matter (PM) emissions are controlled by various control measures such as moisture content, dust suppression, enclosures and covers and wet dust extraction devices.

Note: The description in Condition 7.3.1 is for informational purposes only and implies no limits or constraints.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Emission Control Equipment/Measures
Coal Conditioners	Enclosures and Covers, Dust Suppression, and Wet Dust Extraction Devices

7.3.3 Applicability Provisions

- a.
 - i. An "affected process" for the purpose of these unit-specific conditions is an individual process emission unit that prepares coal for use as a fuel by crushing the coal as described in Conditions 7.3.1 and 7.3.2.
 - ii. Each affected process is also an "affected facility" for purposes of the New Source Performance Standards (NSPS) for Coal Preparation Plants, 40 CFR 60 Subpart Y, pursuant to 40 CFR 60.250(a) and 60.251. This is because this source processes more than 200 tons per day of coal by breaking or crushing, as addressed by Section 7.3 of this permit. The affected facility is subject to applicable requirements of the NSPS, 40 CFR 60 Subpart Y and related requirements in the NSPS, 40 CFR 60 Subpart A, General Provisions.
- b. Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected process in violation of the applicable requirements of Condition 7.3.4(b) (35 IAC 212.123) and Condition 7.3.4(c) (35 IAC 212.321) in the event of a malfunction or breakdown of an affected process. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the

Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

- i. This authorization only allows such continued operation as related to the operation of the coal-fired boilers as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable repair the affected process, remove the affected process from service or undertake other actions so that excess emissions cease.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.3.9(d) and 7.3.10(b). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected process out of service.
- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions

during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.3.4 Applicable Emission Standards

- a. Fugitive emissions, as defined by 35 IAC 211.2490, of the affected processes shall comply with the standard in Condition 5.2.2(a), which addresses visible emissions of fugitive particulate matter, pursuant to 35 IAC 212.301.
- b. The affected processes shall comply with the standard, i.e., 30 percent opacity, in Condition 5.2.2(b), which addresses the opacity of the emission of smoke or other particulate matter from the affected processes, pursuant to 35 IAC 212.123.
- c. The affected processes shall comply with 35 IAC 212.321(a): "no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of [35 IAC 212.321]." (See also Attachment 1.) [35 IAC 212.321(a)]
- d.
 - i. The affected processes shall comply with the applicable standards in Condition 5.2.3, which also address particulate matter emissions from the processes.
 - ii. As an affected process emits fugitive particulate matter, the affected process shall be addressed by the Permittee in its fugitive particulate matter operating program, as required by Condition 5.2.4, and operated in accordance with such program.
- e. Each affected process that is also an affected facilities subject to the NSPS, 40 CFR 60 Subpart Y, shall not discharge into the atmosphere gases which exhibit 20 percent opacity or greater, except during periods of startup, shutdown and malfunction, as defined in 40 CFR 60.2, pursuant to 40 CFR 60.11(c) and 60.254(a).

7.3.5 Non-Applicability of Regulations of Concern

- a. The affected processes are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM because the affected processes do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.3.6 Work Practices

- a.
 - i. The Permittee shall implement and maintain the control measures for the affected processes, such as enclosure, natural surface moisture, application of dust suppressant, and use of dust collection devices, for emissions of particulate matter to support the periodic monitoring for the applicable requirements in Condition 7.3.4, pursuant to Section 39.5(7) (a) of the Act.
 - ii. The control measures implemented and maintained shall be identified in and operated in conformance with the "Control Measures Record" required by Condition 7.3.9(b) (i) to satisfy Condition 7.3.6(a)(i), which record is incorporated by reference into this permit by Condition 5.2.9.
 - iii. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and use each affected process that is subject to the NSPS in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or the USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source [40 CFR 60.11(d)].

7.3.7 Opacity Observation Requirements

- a.
 - i. The Permittee shall have the opacity of the emissions from the affected processes during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as

further specified below, pursuant to Section 39.5(7) (d) of the Act.

- A. Intentionally Blank
 - B. For each affected process, observations shall be conducted every third year from previous observation.
 - C. Upon written request by the Illinois EPA, such observations shall be conducted for specific affected process(es) not later than 45 calendar days after the Permittee received the request or on such later date agreed to by the Illinois EPA.
- ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are each not greater than 10.0 percent.
 - iii.
 - A. For each set of observations required by Conditions 7.3.7(a) (i)(A), (B), and (C), the Permittee shall notify the Illinois EPA at least 7 days in advance of the date of the first observation(s).
 - B. The Permittee shall promptly notify the Illinois EPA of any changes in the date of the first observation(s).
 - iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observation(s), if Illinois EPA personnel are present.
 - v. The Permittee shall submit a written report for these observations not later than 30 days of after the date of completion of each set of opacity observations required by Conditions 7.3.7(a) (i)(A), (B), and (C). The report shall include a copy of the current Reference Method 9 certification of each observer and shall identify the observer's current employer. This report shall also include the following for each observation:
 - A. Identification of the affected process for which observations were conducted.

- B. Date and time of observations.
- C. Description of observation conditions, including recent weather.
- D. Description of the operating conditions of the affected processes.
- E. Raw data.
- F. Opacity determinations.
- G. Conclusions.

7.3.8 Inspection Requirements

- a. The Permittee shall perform inspections of the affected processes on at least a monthly basis to confirm compliance with the requirements of Condition 7.3.6(a). If an affected process is not in operation during an inspection, this shall be noted in the inspection record. The records required by Condition 7.3.9(c) for these inspections shall be signed off by supervisory or management personnel [Sections 39.5(7) (a) and (d) of the Act].
- b. As part of the inspections of Condition 7.3.8(a), the Permittee shall perform observations of the affected processes for visible emissions in accordance with 35 IAC 212.107 to demonstrate compliance with the requirements of Conditions 7.3.4(b) and (e), unless the Permittee elects to perform Reference Method 9 observations in accordance with Condition 7.3.7(a). These observations may be scheduled so that only a number of affected processes are reviewed during each inspection, provided, however, that all affected processes that are in routine service shall be observed at least once during each calendar year in which it is operating. If visible emissions are observed, the Permittee shall take corrective action within 2 hours to return the status of the process to no visible emission or shall conduct observations of opacity by Reference Method 9 within one week in accordance with Condition 7.3.7(a). If the Permittee performs Reference Method 9 observations under this Condition 7.3.8(b), such observations are not subject to the notice requirements of Conditions 7.3.7(a) (iii) through (v) [Sections 39.5(7) (a) and (d) of the Act].

7.3.9 Recordkeeping Requirements

The Permittee shall maintain records of the following for the affected processes, pursuant to Sections 39.5(7) (a) and (e) of the Act:

a. Maximum operating capacity of each affected process (tons/hour).

b. i. The Permittee shall maintain a record, which shall be kept up to date to reflect any changes that the Permittee may elect to make, that contains the following for each affected process for which a control measure(s) must be implemented and maintained pursuant to Condition 7.3.6(a) (i).

A. The type of emission unit (crushers, etc.) and the Permittee's designation for each emission unit with a description of the emission points on the emission unit;

B. Whether the emission unit is considered to be an "affected facility" for purposes of the NSPS, with copies of supporting documentation;

C. Description of the primary control measures that are utilized, with a description of the control measure and estimated frequency of application, if not continuous; and

D. Description of any secondary control measures that would be used based on circumstances (freezing temperatures, recent rain, dry weather, etc.) with identification of the circumstances in which they would be used and whether they would take the place of or supplement the primary control measures.

ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the control measures identified in the record required by Condition 7.3.9(b)(i) are sufficient to assure compliance with Condition 7.3.4(c) at the maximum process weight rate at which each affected process can be operated (tons coal/hour), with supporting emission calculations and documentation for the emission factors and

the efficiency of the control measures being relied upon by the Permittee. This demonstration shall include the information addressed by Condition 7.3.9(a), emission factors for uncontrolled PM emissions, and/or controlled PM emissions published by USEPA or other credible sources.

- iii. Any subsequent revisions to this record related to control measures or affected processes, including their method of operation, shall be submitted not later than 30 days after the date of the revision. Upon request by the Illinois EPA, the Permittee shall submit other relevant information related to the control measures.
- c. The Permittee shall maintain records of the following for the inspections required by Condition 7.3.8:
 - i. Date and time the inspection was performed, name(s) of inspection personnel, and specific affected process(es) inspected.
 - ii. The observed condition of the control measures identified in the record required by Condition 7.3.9(b)(i), for each inspected affected process(es), including the presence of any visible emissions or atypical accumulations of coal fines in the vicinity of the process.
 - iii. A description of any maintenance or repair of equipment associated with control measures identified in the record required by Condition 7.3.9(b)(i) that is recommended as a result of the inspection and associated work order ticket number(s).
 - iv. A description of any corrective action taken if visible emissions were observed, including whether corrective action took place within 2 hours of the observation and whether the status of the process returned to no visible emissions.
- d. The Permittee shall maintain records of the following for each incident when any affected process operated without the control measure(s) required pursuant to the record required by Condition 7.3.9(b)(i) and each incident when an affected process continued to operate during

malfunction or breakdown with excess emissions or excess opacity as addressed by Condition 7.3.3(b):

- i. The date of the incident and identification of the affected process(es) that was involved.
 - ii. A description of the incident, including the control measures that were not present or operated as required by the record identified in Condition 7.3.9(b) (i); other control measures that were operated, if any; the measures taken to minimize and correct deficiencies with chronology; and an explanation whether the emissions or opacity during the incident exceeded any applicable emission or opacity standard, as listed in Condition 7.3.4.
 - iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.
 - iv. The length of time after the incident was identified that the affected processes continued to operate before the control measures identified in the record required by Condition 7.3.9(b) (i) were in place or the processes were shut down (to resume operation only after such control measures were in place); an explanation of why continued operation was necessary; and, if this time was more than one hour, an explanation of why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.
 - v. The estimated total duration of the incident, i.e., the total length of time that the affected processes ran without the control measure(s) required pursuant to the record required by Condition 7.3.9(b) (i) and the estimated amount of coal handled during the incident.
 - vi. A discussion of the probable cause of the incident and any preventative measures taken.
- e. The Permittee shall keep records for all opacity observations made in accordance with Reference Method 9 for the affected processes that it conducts or that are conducted at its behest by individuals

who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.3.7 (Opacity Observations Requirements) or otherwise the identity of the observer, a description of the observations that were made, the operating condition of the affected process(es), the observed opacity, copies of the raw data sheets for the observations, and the reason for the opacity observations, e.g., Reference Method 9 opacity observations required by Condition 7.3.7(a) (i), written request by the Illinois EPA, or any required Reference Method 9 opacity observations following observations of visible emissions under Condition 7.3.8(b).

7.3.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for the affected processes, as follows. Such notifications shall include a description of each deviation and a discussion of the probable cause of deviation, any corrective actions taken, and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act.

- i. For those breakdown or malfunction opacity events that require notification and reporting pursuant to Condition 7.3.10(b)(i), notification and reporting shall be provided pursuant to Condition 7.3.10(b)(i) rather than 7.3.10(a).
- ii. Within 30 days after the conclusion of an incident in which the Permittee continued to operate an affected process for more than 12 operating hours after discovering that emission control measures required by the record identified in Condition 7.3.9(b)(i) were not present or operating, the Permittee shall submit written notice to the Illinois EPA. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.3.9(d).
- iii. A. Except for events and incidents for which notification or reporting is required by Condition 7.3.10(a)(ii) or 7.3.10(b)(i), as referenced in 7.3.10(a)(i), all other notifications

shall be submitted with the quarterly reports required by Condition 7.3.10(b)(ii).

- B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in prior notifications and reports for such deviations.

b. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7) (a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA for incidents when operation of affected process(es) continued with excess emissions or excess opacity during malfunction or breakdown as addressed by Condition 7.3.3(b).

- i. A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile, or electronic mail, for each incident in which the opacity from an affected process exceeds 30 percent for eight or more 6-minute averaging periods within a two-hour period unless the Permittee has begun the shutdown by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.3.10(b)(ii).)
 - B. Upon conclusion of each incident that is two hours or more in duration, the Permittee shall submit a written follow-up notice to the Illinois EPA, Air Compliance Section, within 15 days providing a copy of the records for the incident required by Condition 7.3.9(d).
- ii. The Permittee shall submit quarterly reports to the Illinois EPA that include the following information for incidents during the quarter in which affected processes continued to operate during malfunction or

breakdown with excess emissions or excess opacity. These reports shall be submitted with the quarterly reports submitted for the coal-fired boiler pursuant to Condition 7.1.10-2(a).

- A. A listing of such incidents, in chronological order, that includes:
 - I. The date, time, and duration of each incident;
 - II. The identity of the affected process(es) involved in the incident; and
 - III. Whether a follow-up notice was submitted for the incident pursuant to Condition 7.3.10(b)(i)(B), with the date of the notice.
- B. A description of the incident, discussion of probable cause of the incident, corrective actions taken, and any preventative measures taken; provided, however, that the Permittee need not resubmit information provided in a prior report for an incident, as identified above, but may elect to supplement the prior submittal.
- C. The sum duration of all incidents during the quarter.
- D. If there have been no such incidents during the calendar quarter, this shall be stated in the report.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational changes with respect to the affected processes without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (1) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, or for an activity for which a permit is required pursuant to 35 IAC 201.142.

- a. Handling of solid fuels other than coal.

- b. Operation of additional dust suppressant systems.
- c. Operation of additional dust collection equipment.
- d. Operation of replacement dust suppression systems or dust collection equipment that is of equal or greater effectiveness in controlling visible emissions than the device(s) being replaced, as recognized in a Construction Permit for such system or equipment.

7.3.12 Compliance Procedures

- a. Compliance with Condition 7.3.4 is addressed by the observations, inspections, and recordkeeping required by Conditions 7.3.7(a), 7.3.8, and 7.3.9, respectively.
- b. Compliance with Condition 7.3.6 is addressed by the inspections and recordkeeping required by Conditions 7.3.8 and 7.3.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7) (p) (v) of the Act.

7.4 Fly Ash Handling Equipment

7.4.1 Description

The Permittee operates a fly ash removal system that handles fly ash collected at the coal-fired boilers. Associated particulate matter (PM) emissions are controlled by various control measures such as enclosures, bin vent filters, or dust collection devices.

Note: The description in Condition 7.4.1 is for informational purposes only and implies no limits or constraints.

7.4.2 List of Emission Units and Air Pollution Control Equipment

The following is a list of the fly ash equipment and associated emission control systems at the source:

Emission Unit	Emission Control Equipment/Measures
Ash Transfer System for Unit 5	Baghouses and Enclosures
Ash Transfer System Unit 6	Baghouses and Enclosures
Storage Silo and Loadout for Unit 5	Bin Vent Filter
Storage Silo and Loadout for Unit 6	Bin Vent Filter

7.4.3 Applicability Provisions

- a. An "affected process" for the purpose of these unit-specific conditions, is an individual process emission unit as described in Conditions 7.4.1 and 7.4.2.
- b. Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected process in violation of the applicable requirements of Condition 7.4.4(b) (35 IAC 212.123) and Condition 7.4.4(c) (35 IAC 212.321(a)) in the event of a malfunction or breakdown of an affected process. This authorization is provided pursuant to 35 IAC 201.149, 201.261, and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition

9.2.3 against continued operation in such circumstances.

- i. This authorization only allows such continued operation as related to the operation of the coal-fired boilers as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable repair the affected process, remove the affected process from service, or undertake other action so that excess emissions cease.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.4.9(d) and 7.4.10(b). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected process out of service.
- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.4.4 Applicable Emission Standards

- a. Fugitive emissions, as defined by 35 IAC 211.2490, of the affected processes shall comply with the standard in Condition 5.2.2(a), which addresses visible emissions of fugitive particulate matter, pursuant to 35 IAC 212.301.
- b. The affected processes shall comply with the standard in Condition 5.2.2(b), 30 percent opacity, which addresses the opacity of the emission of smoke or other particulate matter from the affected processes, pursuant to 35 IAC 212.123.
- c. The affected processes shall comply with 35 IAC 212.321(a): "no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of [35 IAC 212.321]." (See also Attachment 1.) [35 IAC 212.321(a)]
- d.
 - i. The affected processes shall comply with the applicable standards in Condition 5.2.3, which also address particulate matter emissions from the processes.
 - ii. As an affected process emits fugitive particulate matter, the affected process shall be addressed by the Permittee in its fugitive particulate matter operating program, as required by Condition 5.2.4, and operated in accordance with such program.

7.4.5 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected processes not being subject to the New Source Performance Standards (NSPS) for Nonmetallic Mineral Processing Plants, 40 CFR Part 60, Subparts A and OOO, because the affected processes do not meet the definition of a nonmetallic mineral processing plant because there is no equipment used to crush or grind ash.
- b. The affected processes are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM because the affected processes do not use an add-on control device to

achieve compliance with an emission limitation or standard.

7.4.6 Work Practices

- a. i. The Permittee shall implement and maintain the control measures for the affected processes, such as enclosure, for emissions of particulate matter to support the periodic monitoring for the applicable requirements in Condition 7.4.4, pursuant to Section 39.5(7) (a) of the Act.
- ii. The control measures implemented and maintained shall be identified and operated in conformance with the "Control Measures Record" required by Condition 7.4.9(b)(i) to satisfy Condition 7.4.6(a) (i), which record is incorporated by reference into this permit by Condition 5.2.9.

7.4.7 Opacity Observation and Emission Testing Requirements

- a. i. The Permittee shall have the opacity of the emissions from the affected processes during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7)(b) of the Act.
 - A. Intentionally Blank
 - B. For each affected process, observations shall be conducted every third year from previous observation.
 - C. Upon written request by the Illinois EPA, such observations shall be conducted for specific affected process(es) not later than 45 calendar days after the Permittee has received the request or such later date agreed to by the Illinois EPA.
- ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are each not greater than 10.0 percent.
- iii. A. For each set of observations required by Conditions 7.4.7(a) (i)(A), (B), and (C),

the Permittee shall notify the Illinois EPA at least 7 days in advance of the date of the first observation(s).

- B. The Permittee shall promptly notify the Illinois EPA of any changes in the date of the first observation(s).
- iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observation(s), if Illinois EPA personnel are present.
- v. The Permittee shall submit a written report for these observations not later than 30 days after the date of completion of each set of opacity observations required by Conditions 7.4.7(a)(i)(A), (B), and (C). The report shall include a copy of the current Reference Method 9 certification of each observer and shall identify the observer's current employer. This report shall also include the following for each observation:
 - A. Identification of the affected process for which observations were conducted.
 - B. Date and time of observations.
 - C. Description of observation condition, including recent weather.
 - D. Description of the operating conditions of the affected processes.
 - E. Raw data.
 - F. Opacity determinations.
 - G. Conclusions.
- b. i. Within 90 days after the Permittee has received a written request from the Illinois EPA, the Permittee shall have the PM emissions at the stacks or vents of the affected processes, as specified in such request, measured during representative operating conditions, as set forth below, pursuant to Section 39.5(7)(d) of the Act.
- ii. A. Testing shall be conducted using appropriate Reference Methods, including

Reference Method 5 or 17 for PM emissions.

- B. Compliance may be determined from the average of three valid test runs, subject to the limitations and conditions contained in 35 IAC Part 283.
- iii. The Permittee shall submit a test plan as required by Condition 8.6.2.
- iv. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may, at its discretion, accept notification with shorter advance notice provided that the Illinois EPA will not accept such notification if it interferes with the Illinois EPA's ability to observe the testing.
- v. The Permittee shall expeditiously submit complete Final Report(s) for required emission testing to the Illinois EPA, no later than 90 days after the date of testing. These reports shall include the information specified in Condition 8.6.3 and a detailed description of the operating conditions of the affected process(es) during testing, including operating rate (tons/hr) and the control devices being used.

7.4.8 Inspection Requirements

- a. The Permittee shall perform inspections as follows to confirm compliance with the requirements of Condition 7.4.6(a) [Sections 39.5(7) (a) and (d) of the Act].
 - i. Affected processes other than loadout operations shall be inspected on at least a monthly basis.
 - ii. Affected loadout operations shall be inspected on at least a weekly basis.

- iii. If an affected process is not in operation during an inspection, this shall be noted in the inspection record.
 - iv. The records required by Condition 7.4.9(c) for these inspections shall be signed off by supervisory or management personnel.
- b. As part of the inspections of Condition 7.4.8(a), the Permittee shall perform observations of the affected processes for visible emissions in accordance with 35 IAC 212.107 to demonstrate compliance with the requirements of Condition 7.4.4(b), unless the Permittee elects to perform Reference Method 9 observations in accordance with Condition 7.4.7(a). These observations may be scheduled so that only a number of affected processes are reviewed during each inspection, provided however, that all affected processes that are in routine service shall be observed at least once during each calendar year in which it is operating other than loadout operations which shall each be observed at least once during each calendar quarter in which it is operating [Sections 39.7(b) and (d) of the Act].
- c. If visible emissions are observed, the Permittee shall take corrective action within 2 hours to return the status of the process to no visible emission or shall conduct observations of opacity by Reference Method 9 within one week in accordance with Condition 7.4.7(a). If the Permittee performs Reference Method 9 observations under this Condition 7.4.8(b), such observations are not subject to the notice requirements of Condition 7.4.7(a) (iii) through (v) [Sections 39.5(7) (b) and (d) of the Act].
- d. The Permittee shall perform and document an inspection of the fly ash baghouses to confirm proper condition and operation at least once per month. This inspection shall include recording and verifying that the monitored baghouse differential pressure is within the operating range specified in the record required by Condition 7.4.9(b)(i) and that visible emissions are not observed in the baghouse exhaust [Sections 39.5(7) (a) and (d) of the Act].

7.4.9 Recordkeeping Requirements

The Permittee shall maintain records of the following for the affected processes, pursuant to Sections 39.5(7) (a) and (e) of the Act:

- a. The Permittee shall keep a record of the maximum operating capacity of each affected process (tons/hour).
- b. i. The Permittee shall maintain a record, which shall be kept up to date to reflect any changes that the Permittee may elect to make, that contains the following for each affected process for which a control measure(s) must be implemented and maintained pursuant to Condition 7.4.6(a) (i).
 - A. The type of emission unit (pneumatic transfer system, silos, etc.) and the Permittee's designation for each emission unit with a description of the emission points on the emission unit;
 - B. Description of the primary control measures that are utilized, with a description of the control measure and estimated frequency of application, if not continuous; and
 - C. Description of any secondary control measures that would be used based on circumstances (freezing temperatures, recent rain, dry weather, etc.) with identification of the circumstances in which they would be used and whether they would take the place of or supplement the primary control measures.
- ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the control measures identified in the record required by Condition 7.4.9(b) (i) are sufficient to assure compliance with Condition 7.4.4(c) at the maximum process weight rate at which each affected process can be operated (tons fly ash/hour), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. This demonstration shall include the information addressed by Condition 7.4.9(a), results of any testing conducted pursuant to Condition 7.4.7(b), emission factors for uncontrolled PM emissions, and/or controlled PM emissions published by USEPA or other credible sources.

- iii. Any subsequent revisions to this record related to control measures or affected processes, including their method of operation, shall be submitted not later than 30 days after the date of the revision. Upon request by the Illinois EPA, the Permittee shall submit other relevant information related to the control measures.
- c. The Permittee shall maintain records of the following for the inspections required by Condition 7.4.8:
 - i. Date and time the inspection was performed, name(s) of inspection personnel, and specific affected process(es) inspected.
 - ii. The observed condition of the control measures identified in the record required by Condition 7.4.9(b)(i) for each inspected affected process, including the presence of any visible emissions or atypical accumulations of fly ash in the vicinity of the process.
 - iii. A description of any maintenance or repair of equipment associated with control measures identified in the record required by Condition 7.4.9(b)(i) that is recommended as a result of the inspection and associated work order ticket number(s).
 - iv. A description of any corrective action taken if visible emissions were observed, including whether corrective action took place within 2 hours of the observation and whether the status of the process returned to no visible emissions.
- d. The Permittee shall maintain records of the following for each incident when any affected process operated without the control measure(s) required pursuant to the record required by Condition 7.4.9(b)(i) and each incident when an affected process continued to operate during malfunction or breakdown with excess emissions or excess opacity as addressed by Condition 7.4.3(b):
 - i. The date of the incident and identification of the affected process(es) that was involved.
 - ii. A description of the incident, including the control measure(s) that was not present or

operated as required by the record identified in Condition 7.4.9(b) (i); other control measures that were operated, if any; the measures taken to minimize and correct deficiencies with chronology; and an explanation whether the emissions or opacity during the incident exceeded any applicable emission or opacity standard, as listed in Condition 7.4.4.

- iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.
 - iv. The length of time after the incident was identified that the affected processes continued to operate before the control measures identified in the record required by Condition 7.4.9(b) (i) were in place or the processes were shut down (to resume operation only after established control measures were in place); an explanation of why continued operation was necessary; and, if this time was more than one hour, an explanation of why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.
 - v. The estimated total duration of the incident, i.e., the total length of time that the affected processes ran without the control measure(s) required pursuant to the record required by Condition 7.4.9(b)(i) and the estimated amount of fly ash handled during the incident.
 - vi. A discussion of the probable cause of the incident and any preventative measures taken.
- e. The Permittee shall keep records for all opacity observations made in accordance with Reference Method 9 for the affected processes that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.4.7 (Opacity Observations and Emission Testing Requirements), or otherwise the identity of the observer, a description of the observations that were made, the operating condition of the affected process(es), the observed opacity, copies of the raw

data sheets for the observations, and the reason for the opacity observations, e.g., Reference Method 9 opacity observations required by Condition 7.4.7(a)(i), written request by the Illinois EPA, or any required Reference Method 9 opacity observations following observations of visible emissions under Condition 7.4.8(b).

7.4.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for the affected processes, as follows. Such notifications shall include a description of each deviation and a discussion of the probable cause of deviation, any corrective actions taken, and any preventative measures taken, pursuant to Section 39.5(7) (f) (ii) of the Act.

- i. For those breakdown or malfunction PM and opacity events that require notification and reporting pursuant to Condition 7.4.10(b) (i), notification and reporting shall be provided pursuant to Condition 7.4.10(b)(i) rather than 7.4.10(a).
- ii. Within 30 days after the conclusion of an incident in which the Permittee continued to operate an affected process for more than 12 operating hours after discovering that emission control measures required by the record identified in Condition 7.4.9(b) (i) were not present or operating, the Permittee shall submit written notice to the Illinois EPA. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.4.9(d).
- iii.
 - A. Except for events and incidents for which notification or reporting is required by Condition 7.4.10(a) (ii) or 7.4.10(b) (i), as referenced in 7.4.10(a) (i), all other notifications shall be submitted with the quarterly reports required by Condition 7.4.10(b)(ii).
 - B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations.

For this purpose, the Permittee need not resubmit the detailed information provided in prior notifications and reports for such deviations.

b. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7) (a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA for incidents when operation of an affected process(es) continued with excess emissions or excess opacity during malfunction or breakdown as addressed by Condition 7.4.3(b).

- i. A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile or electronic mail, for each incident in which the opacity from an affected process exceeds 30 percent for eight or more 6-minute averaging periods within a two-hour period unless the Permittee has begun the shutdown by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.4.10(b) (ii).)
- B. Upon conclusion of each incident that is two hours or more in duration, the Permittee shall submit a written follow-up notice to the Illinois EPA, Air Compliance Section, within 15 days providing a copy of the records for the incident required by Condition 7.4.9(d).
- ii. The Permittee shall submit quarterly reports to the Illinois EPA that include the following information for incidents during the quarter in which affected processes continued to operate during malfunction or breakdown with excess emissions or excess opacity. These reports shall be submitted with the quarterly reports submitted for the coal-fired boiler pursuant to Condition 7.1.10-2(a).
 - A. A listing of such incidents, in chronological order, that includes:

- I. The date, time, and duration of each incident;
 - II. The identity of the affected process(es) involved in the incident; and
 - III. Whether a follow-up notice was submitted for the incident pursuant to Condition 7.4.10(b)(i)(B), with the date of the notice.
- B. A description of the incident, discussion of probable cause of the incident, corrective actions taken, and any preventative measures taken; provided, however, that the Permittee need not resubmit information provided in a prior report for an incident, as identified above, but may elect to supplement the prior submittal.
 - C. The sum duration of all incidents during the quarter.
 - D. If there have been no such incidents during the calendar quarter, this shall be stated in the report.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational changes with respect to the affected processes without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7) (a) and (1) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, or for an activity for which a permit is required pursuant to 35 IAC 201.142.

- a. Operation of additional dust control measures.
- b. Operation of replacement dust control measures that are of equal or greater effectiveness in controlling visible emissions than the measures being replaced, as recognized in a Construction Permit for such measures.
- c. Temporary stockpile storage of fly ash and handling of such fly ash for offsite shipment as such

activities are identified in and managed in accordance with the Fugitive Particulate Matter Operating Program required by Condition 5.2.4.

7.4.12 Compliance Procedures

- a. Compliance with Condition 7.4.4 is addressed by the observations, inspections, and recordkeeping required by Conditions 7.4.7(a), 7.4.8, and 7.4.9, respectively.
- b. Compliance with Condition 7.4.6 is addressed by the inspections and recordkeeping required by Conditions 7.4.8 and 7.4.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7) (p) (v) of the Act.

7.5 Gasoline Storage Tank

7.5.1 Description

The Permittee stores gasoline used for plant vehicles.

Note: The description in Condition 7.5.1 is for informational purposes only and implies no limits or constraints.

7.5.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit Description	Emission Control Equipment
Gasoline Storage Tank 1000 Gallon Capacity with Submerged Loading Pipe	None

7.5.3 Applicability Provisions

An "affected storage tank" for the purpose of these unit-specific conditions, is the storage tank described in Conditions 7.5.1 and 7.5.2.

7.5.4 Applicable Emission Standards

- a. The affected storage tank is subject to 35 IAC 215.122(b) and 215.583(a)(1), which provide that:
 - i. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe, submerged fill, or an equivalent device approved by the Illinois EPA according to the provisions of 35 IAC 201 or unless such tank is a pressure tank as described in 35 IAC 215.121(a) or is fitted with a recovery system as described in 35 IAC 215.121(b)(2) [35 IAC 215.122(b)].

Note: The exception to this standard at 35 IAC 215.122(c) is not applicable because the vapor pressure of gasoline is greater than 17.24 kPa (2.5 psia) at 294.3°K (70°F).

- ii. No person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank at a gasoline dispensing facility unless the tank is equipped with a submerged loading pipe [35 IAC 215.583(a)(1)].

- b. The affected storage tank is subject to 35 IAC 215.583(a), which provides that:
 - i. No person shall cause or allow the transfer of gasoline from any delivery vessel into a stationary storage tank at a gasoline dispensing facility unless the vapors displaced from the storage tank during filling are processed by a vapor control system that includes a vapor collection system that meets the requirements of 35 IAC 215.583(d)(4) and the delivery vessel displays the appropriate sticker pursuant to the requirements of 35 IAC 215.584(b) or (d) [35 IAC 215.583(a) (2)].
 - ii. All tank vent pipes shall be equipped with pressure/vacuum relief valves set to resist a pressure of at least 3.5 inches water column and to resist a vacuum of no less than 6.0 inches water column [35 IAC 215.583(a) (3)].

7.5.5 Non-Applicability of Regulations of Concern

- a. The affected storage tank is not subject to the New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels), 40 CFR Part 60, Subpart Kb, because the capacity of the tank is less than 40 cubic meters (10,566 gallons).
- b. The affected storage tank not being subject to 35 IAC 215.121 or 35 IAC 215.122(a), because the capacity of the affected storage tank is less than 40,000 gallons.
- c. The affected gasoline storage tank is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for VOM because the affected storage tank does not use add-on controls to achieve compliance with any applicable emission limits.
- d. The affected storage tank is not subject to the National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities, 40 CFR 63 Subpart CCCCCC, because the gasoline storage tank is not located at an Area Source for Hazardous Air Pollutants.

7.5.6 Work Practices, Operational and Production Limits, and Emission Limitations

- a. Pursuant to Condition 7.5.4(a) (35 IAC 215.122(b) and 215.583(a)), the affected storage tank shall be equipped, operated and maintained with a submerged loading pipe or an equivalent device approved by the Illinois EPA. (The Illinois EPA has not approved use of other equivalent equipment in lieu of a submerged loading pipe.)
- b. Pursuant to Condition 7.5.4(b) (i) (35 IAC 215.583(a) (3)), each affected storage tank shall be equipped, operated and maintained with a vapor control/collection system that:
 - i. A. Is operated to prevent leaks of vapor to the atmosphere, that is, a loss of vapor to the atmosphere that equals or exceeds 100 percent of the lower explosive limit (measured as propane), as determined by the procedure specified in 35 IAC 215.583(d) (4) (A) [35 IAC 215.583(d) (4)].
 - B. Is repaired and retested within 15 business days of the discovery of such a leak of vapor by the Permittee or the Illinois EPA [35 IAC 215.583(d)(5)].
 - ii. Is operated to prevent avoidable leaks of liquid during the filling of the affected storage tank [35 IAC 215.583(d) (4) (B)].
 - iii. Is operated in accordance with written instructions prepared and maintained by the Permittee [35 IAC 215.583(d) (1)].
 - iv. Is maintained and repaired in accordance with written procedures prepared and maintained by the Permittee, which procedures provide for repair, replacement or modification of any worn out or malfunctioning component and maintenance of gauges, meters and other specified testing devices to keep them in proper working order [35 IAC 215.583(c) (1), (c) (3); (d) (1), and (d) (3)].

7.5.7 Intentionally Blank

7.5.8 Inspection Requirements

- a. On an annual basis by May 1st of each year, the Permittee shall conduct a detailed inspection of the affected storage tank and associated vapor control/collection system to review its physical condition and ability to comply with the applicable

equipment and operational requirements of Conditions 7.5.6(a) and (b), pursuant to Sections 39.5(7) (a) and (d) of the Act.

7.5.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected storage tank, pursuant to Sections 39.5(7) (a) and (e) of the Act:

- a. A file for the affected storage tank that contains the following information, which shall be kept current:
 - i. Design information for the capacity of the tank and the presence of a permanent submerged loading pipe.
 - ii. Design information for the vapor control/collection system for the tank.
 - iii. Design information for the presence of pressure and vacuum relief valves on the vent pipes of each tank, including documentation for the pressure and vacuum settings of the relief valves (inches water column).
 - iv. The Permittee's instructions for the operation of the vapor control/collection system on the tank.
 - v. The Permittee's instructions for the maintenance of the vapor control/collection system on the tank, which, at a minimum, shall include a description of necessary maintenance operations and procedures for initiating repairs in the event of any malfunction of the system.
- b. Operating log(s) or other records for the affected storage tank and associated vapor control/collection system that, at a minimum, shall include the following:
 - i. Records for each shipment of material loaded into an affected storage tank that include:
 - A. Copies of the invoice, bill of lading or other documentation from the supplier that provides the type of material and the amount of shipment;

- B. Whether the delivery vessel displayed an appropriate sticker, pursuant to 35 IAC 215.584; and
 - C. Whether leaks of liquid occurred during the filling of the tank and, if so, whether such leaks were avoidable, with explanation.
- ii. Information addressing leak(s) of vapor from the vapor collection system or delivery vehicle unloading points during the filling of a tank, including identification of the discovery of any such leaks, accompanied by (1) a detailed description and explanation of the incident, (2) a description of the repair(s) to the system that were made and the date repairs were completed, and (3) documentation for retesting of the system, with result(s) and date(s).
 - iii. Information identifying other deviations from applicable equipment or operational requirements, not addressed by Conditions 7.5.9(b)(i), (ii) or (iii), with detailed description and explanation.
 - iv. Information documenting performance of the inspections that are required by Condition 7.5.8(a), including date and description of the inspection, confirmation of the adequacy of the specific features of the tank and the vapor control/collection system required for control of emissions, and identification of any such features that are not in proper working order or otherwise deficient, with recommendations for maintenance, repair or replacement.
- c. Inspection, maintenance and repair log(s) or other records for the affected storage tank and the vapor control/collection system that list activities performed, with date and description, including, at a minimum, activities related to the submerged loading pipes, the pressure and vacuum relief valves on the vent pipes of each tank, the vapor collection/control system (which information shall also address implementation of the maintenance procedures required by Condition 7.5.9(a)(iv)), the gauges, meters and other specified testing devices on the tank and the vapor collection/control system, repairs related to unavoidable liquid leaks, and repairs related to vapor leaks.

- d. Records of the amount of material dispensed from the affected storage tank, combined (gallons/month and gallons/year, by type of material).

7.5.10 Reporting Requirements

For the affected storage tank, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as follows. Such notifications shall include a description of the deviations and a discussion of the probable cause of such deviations, any corrective actions taken and any preventative measures taken [Sections 39.5(7) (a) and (f) of the Act].

- a. Notification within 30 days for any filling of an affected storage tank that was not in compliance with the requirements of Conditions 7.5.4(a) or 7.5.6(a), i.e., that was conducted without a submerged loading pipe.
- b. Notification within 30 days for any vapor leak that was not successfully repaired within 15 business days of discovery.
- c. Notification with the quarterly reports required for the coal-fired boilers by Condition 7.1.10-2(a) for any other deviations during each calendar quarter not addressed by notifications pursuant to Condition 7.5.10((a) or (b)), including deviations from required work practice, inspection and recordkeeping requirements.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected storage tank without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7) (a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, or for an activity constituting construction or modification as defined in 35 IAC 201.102.

- a. Changes to components related to the submerged loading pipe, vapor control/collection system, and pressure/vacuum relief valves, including addition of new components and repair and replacement of components.

- b. Changes in the material stored in the affected storage tank.

7.5.12 Compliance Procedures

- a. Compliance with Condition 7.5.4(a) is addressed by the use of a submerged loading pipe as required in Condition 7.5.6(a) and by the inspections and recordkeeping required by Conditions 7.5.8 and 7.5.9, respectively.
- b. Compliance with Condition 7.5.4(b)(i) is addressed by the use of a vapor control/collection system as required in Condition 7.5.6(b) and by the inspections and recordkeeping required by Conditions 7.5.8 and 7.5.9, respectively.
- c. Compliance with Condition 7.5.4(b)(ii) is addressed by the inspections and recordkeeping required by Conditions 7.5.8 and 7.5.9, respectively.
- d. Compliance with Condition 7.5.6 is addressed by the inspections and the recordkeeping required by Conditions 7.5.8 and 7.5.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7) (p)(v) of the Act.

7.6 Auxiliary Boiler

7.6.1 Description

The auxiliary boiler is a 245 mmBtu/hr fuel combustion emission unit used to provide heat and steam for the plant. It is not used to directly generate electricity. The boiler is fueled by natural gas. This auxiliary boiler is equipped with a continuous oxygen trim system that maintains an optimum air to fuel ratio.

Note: The description in Condition 7.6.1 is for informational purposes only and implies no limits or constraints.

7.6.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Control Equipment
BLR1	Natural Gas Fired Boiler (1976)	None

7.6.3 Applicability Provisions

- a. The "affected boiler" for the purpose of these unit-specific conditions is the boiler described in Conditions 7.6.1 and 7.6.2.
- b. Because the boiler is located at a major source of HAPs, the affected boiler is also an affected source under the NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD. As an affected source, the Permittee must comply with applicable requirements of the NESHAP, 40 CFR 63 Subpart DDDDD, and related requirements of 40 CFR 63 Subpart A, General Provisions, for the affected boiler. For this purpose, the affected boiler is an existing boiler designed to burn gas 1 fuels, in the subcategory specified at 40 CFR 63.7499(1).

7.6.4 Applicable Emission Standards

- a. The affected boiler shall comply with the opacity standard in Condition 5.2.2(b), i.e., 30 percent opacity, pursuant to 35 IAC 212.123.
- b. The emissions of CO from the affected boiler shall not exceed 200 ppm, corrected to 50 percent excess air, pursuant to 35 IAC 216.121.

7.6.5 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected boiler not being subject to the federal Acid Rain program because it is not a utility unit, as it does not supply steam to an electric generator. (Refer to 40 CFR 72.2 and 72.6)
- b. This Permit is issued based on the affected boiler not being subject to the control requirements of 40 CFR 63 Subpart DDDDD, the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. This is because the affected boiler is an existing gas fired boiler, as provided by 40 CFR 63.7506(b) (1)
- c. The affected boiler is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for any pollutants because the affected boiler does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.6.6 Work Practices, Operational and Production Limits, and Emission Limitations

- a. Intentionally Blank
- b. Pursuant to Section 39.5(7) (a) of the Act, pipeline quality natural gas shall be the only fuel fired in the affected boiler.
- c.
 - i. Pursuant to 40 CFR 63.7500 (a) (1) and 40 CFR 63.7540 (a)(10), the Permittee must conduct an annual tune-up of the affected boiler to demonstrate continuous compliance as specified in 40 CFR 63.7540 (a) (10) (i) through (vi). This frequency does not apply to an affected boiler with continuous oxygen trim systems that maintain an optimum air to fuel ratio.
 - ii. Pursuant to 40 CFR 63.7540 (a) (12), if the affected boiler has a continuous oxygen trim system that maintains an optimum air to fuel ratio, the Permittee must conduct a tune-up of the affected boiler every 5 years as specified in 40 CFR 63.7540 (a) (10) (i) through (vi) to demonstrate continuous compliance.
 - iii. Pursuant to 40 CFR 63.7500 (a) (1) and 40 CFR 63.7540(a)(10), for the tune-ups in Conditions 7.6.6(c) (i) and (ii), the Permittee must conduct the tune-up while burning the type of fuel (or fuels in case

of boilers that routinely burn a mixture that provided the majority of the heat input to the affected boiler over the 12 months prior to the tune-up.

- iv. Pursuant to 40 CFR 63.7515(d), each annual tune-up must be no more than 13 months after the previous tune-up.
 - v. Pursuant to 40 CFR 63.7549(a)(12), the Permittee may delay the burner inspection specified in 40 CFR 63.7540 (a)(10)(i) until the next scheduled or unscheduled boiler shutdown, but the Permittee must inspect the burner at least once every 72 months.
 - vi. Pursuant to 40 CFR 63.7540(a)(12), if an oxygen trim system is utilized on a boiler without emission standards to reduce the tune-up frequency to once every 5 years, the oxygen level must be set no lower than the oxygen concentration measured during the most recent tune-up.
 - vii. Pursuant to 40 CFR 63.7515(d), each 5-year tune-up must be conducted no more than 61 months after the previous tune-up.
 - viii. Pursuant to 40 CFR 63.7540(a)(13), if the affected boiler is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.
 - ix. Pursuant to 39.5(7)(b) and (c) of the Act, if the affected boiler has not operated with a continuous oxygen trim system since the previous tune up and more than one year has passed since the previous tune up, the Permittee must complete the subsequent tune up for that year, no later than the end of that year.
- d. Pursuant to 40 CFR 63.7500(a)(3), at all times, the Permittee shall operate and maintain the affected boiler (as defined in 40 CFR 63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

7.6.7 Opacity Observation Requirements

- a. The Permittee shall have the opacity of the emissions from the affected boiler during

representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7) (d) of the Act.

- i. On an annual basis, unless the boiler operates for less than 500 hours in the calendar year.
 - ii. Upon written request by the Illinois EPA, such testing shall be conducted within 45 calendar days of the request, or on the date that the affected boiler next operates, or on the date agreed upon by the Illinois EPA, whichever is later.
- b. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are not greater than 10.0 percent.
- c. For each set of observations required by Conditions 7.6.7(a) (i) and (ii), the Permittee shall notify the Illinois EPA at least 5 days in advance of the date of the first observations. This notification shall include the name and employer of the observer(s) and identify any concerns for successful completion of observations, i.e., lack of suitable point for proper observation or inability to conduct observations under specified operating conditions. This condition supersedes the requirements of Condition 8.6.2. If the opacity observed during such test of the affected boiler is less than 10 percent opacity further advance notifications are not required.
- d. The Permittee shall promptly notify the Illinois EPA of any changes in the date of the observations.
- e. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observations, if Illinois EPA personnel are present.
- f. The Permittee shall submit a written report for this testing within 15 days of the date of testing. This report shall include relevant information specified in Condition 8.6.3 and the following information:
 - i. Summary of results.
 - ii. Name of certified observer(s), copy of their current certification(s), and name of employer.

- iii. Description of observation location and meteorological conditions.
- iv. Detailed description of the operating conditions of the affected boiler during the observations, including fuel consumption (scf/hr) and firing rate (mmBtu/hr).

7.6.8 Intentionally Blank

7.6.9 Recordkeeping Requirements

The Permittee shall maintain the following records for the affected boiler, pursuant to Sections 39.5(7) (a) and (e) of the Act:

- a. Intentionally Blank
- b.
 - i. Records of gas usage for the affected boiler in scf/month and scf/year.
 - ii. Records of operating hours (hours/calendar year).
- c. Records for all opacity observations made in accordance with Reference Method 9 for the affected boiler that the Permittee conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.6.7(a), or otherwise the identity of the observer, a description of the observations that were made, the operating condition of the boiler, the observed opacity, and copies of the raw data sheets for the observations.
- d. Pursuant to 40 CFR 63.7540(a)(10)(vi), the Permittee shall maintain on-site and submit, if requested by the Illinois EPA, a report containing the boiler tune-up information described in 40 CFR 63.7540(a)(10)(vi)(A) through (C).

7.6.10 Reporting Requirements

a. Reporting of Deviations

For the affected boiler, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as follows. These notifications shall include a description of such deviations, including whether they occurred during startup or malfunction/breakdown, and a discussion of the

probable cause of such deviations, any corrective actions taken and any preventative measures taken [Sections 39.5(7) (a) and (f) of the Act].

- i. The Permittee shall submit written notice to the Illinois EPA within 30 days after any deviation from the relevant applicable requirement in Condition 7.6.4.
- ii.
 - A. The Permittee shall undertake reporting with the quarterly reports required for the coal-fired boilers by Condition 7.1.10-2(a) for deviations from the work practice requirements, and recordkeeping requirements.
 - B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported in writing to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in the initial notifications and reports for such deviations.
- b. Pursuant to 40 CFR 63.7550(b), the Permittee shall submit a report, no later than January 31 of the year following the year during which a boiler tune-up is performed pursuant to Condition 7.6.6(c), with the boiler tune-up information specified at 40 CFR 63.7550 (c) (5) (i) through (iii), (xiv) and (xvii).

7.6.11 Intentionally Blank

7.6.12 Compliance Procedures

- a. Compliance with the opacity limit in Condition 7.6.4(a) is addressed by the observations and recordkeeping requirements of Conditions 7.6.7(a) and 7.6.9(c), respectively.
- b. Compliance with the CO limit of Condition 7.6.4(b) is addressed by the work practices and recordkeeping required by Conditions 7.6.6(a)(i) and 7.6.9, respectively.
- c. Compliance with the work practices and fuel restriction required by Condition 7.6.6 is addressed by the recordkeeping required by Condition 7.6.9.

Note: This condition is included in this permit pursuant to Section 39.5(7) (p) (v) of the Act.

7.7 Dry Sorbent Injection Handling Facilities

7.7.1 Description

The sorbent handling facilities receive, store and process the sorbent for the sorbent handling systems on the coal-fired boilers. There are two facilities, each designed to handle the sorbent for a pair of boilers but with the reserve capability to transfer sorbent to the other pair of boilers. The facility for Boilers 51 and 52 is addressed by Construction Permit 10120020 and facility for Boilers 61 and 62 is addressed by Construction Permit 10120021. The emission units in each facility include a pneumatic unloading station for sorbent feeding storage silos with bin vent filters, enclosed milling equipment, and enclosed weigh hoppers.

Note: The description in Condition 7.7.1 is for informational purposes only and implies no limits or constraints.

7.7.2 List of Emission Units and Air Pollution Control Equipment

The following is a list of the emission units and associated emission control systems in each sorbent handling facility:

Emission Unit Description	Controls
Rail and Truck Unloading Station	
Storage Silos	Bin Vent Baghouse
Weigh Hoppers	Bin Vent Baghouse
Enclosed Mills	

7.7.3 Applicability Provisions

- a. An "affected unit" for the purpose of these unit-specific conditions is an individual process emission unit that handles sorbent, as described in Conditions 7.7.1 and 7.7.2.
- b. The affected units are subject to the NSPS for Nonmetallic Mineral Processing Plants, 40 CFR 60 Subpart 000, pursuant to 40 CFR 60.670(a)(1). These affected units are subject to applicable requirements of the NSPS, 40 CFR 60 Subpart 000, and related requirements in the General Provisions of the NSPS, 40 CFR 60 Subpart A.

7.7.4 Applicable Emission Standards

- a. Pursuant to 40 CFR 60.672(b) and Table 3 of 40 CFR 60 Subpart 000, fugitive emissions from the affected units must not exceed 7 percent opacity.

- b. Each affected unit shall comply with 35 IAC 212.321(a): "no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of [35 IAC 212.321]." (See also Attachment 1.) Each affected unit, e.g., each storage silo, shall demonstrate compliance individually.
- c. The state standard that addresses fugitive emissions, as defined by 35 IAC 211.2490, of the affected units as set forth in Condition 5.2.2(a).
- d. The state standard that addresses the opacity of the emission of smoke or other particulate matter from the affected units as set forth in Condition 5.2.2(b).

7.7.5 Non-Applicability Provisions

- a. Pursuant to 40 CFR 64.2(a)(3), the affected units are not subject to 40 CFR Part 64, CAM, for PM because the affected units do not have potential pre-control device PM emissions that equal or exceed the threshold for a major source.

7.7.6 Work Practices, Operational Limits and Emission Limits

- a. At all times, the Permittee shall maintain and operate the affected units including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions, pursuant to 40 CFR 60.11(d).
- b. Pursuant to Construction Permits 10120020 and 10120021: [T1]
 - i. The amount of dry sorbent received by each sorbent handling facility shall not exceed the following limits:

Facility	Limit (tons/year)
Unit 5	219,000
Unit 6	219,000

- ii. Hourly emissions of PM, PM₁₀ and PM_{2.5} from each sorbent handling facility shall not exceed the following limits. These limits do not address emissions during cleaning of a

mill, when the mill is vented to the atmosphere through the cleaning water tank.

Facility	Limits (lbs/hour)		
	PM	PM ₁₀	PM _{2.5}
Unit 5	0.53	0.53	0.53
Unit 6	0.53	0.53	0.53

- iii. Annual emissions of PM, PM₁₀ and PM_{2.5} from each sorbent handling facility shall each not exceed the following limits:

Facility	Limits (tons/year)		
	PM	PM ₁₀	PM _{2.5}
Unit 5	2.6	2.6	2.6
Unit 6	2.6	2.6	2.6

- iv. Compliance with the annual limits in Conditions 7.7.6(b)(i) and (iii) shall be determined from the sum of the data for the current month plus the preceding 11 months (running 12 months total).
- v. There shall be no visible emissions of fugitive particulate matter from the sorbent handling facilities.
- vi. Maintenance and repair of filters and the control measure shall be performed to assure that such controls function properly when material is being handled.

7.7.7 Opacity Observation Requirements

- a. Pursuant to 40 CFR 60.675(c)(1), in determining compliance with the opacity standard in Condition 7.7.4(a), the Permittee shall use Reference Method 9 and the procedures in 40 CFR 60.11 with the following additions:
- The minimum distance between the observer and emission source shall be 15 feet.
 - The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust).
 - The observer position relative to the sun required by Reference Method 9 must be followed.
- b. Pursuant to 40 CFR 60.675(c)(2), in determining compliance with opacity standards in Condition 7.7.4(a) for the affected rail and truck unloading

station, storage silos and weigh hoppers using Reference Method 9 the duration of the observations shall be 1 hour (ten 6-minute averages). The duration of the Reference Method 9 observations may be reduced to the duration these affected units operate but the duration of observations shall not be less than 30 minutes.

- c. Pursuant to 40 CFR 60.675(c)(3), in determining compliance with opacity standards in Condition 7.7.4(a) for the affected enclosed mills using Method 9 the duration of the Method observations shall be 30 minutes (five 6-minute averages).
- d. Pursuant to 40 CFR 60 Subpart 000 Table 3, observations for fugitive emissions from the truck and rail car unloading and mills must be repeated every 5 years.
- e. Pursuant to 40 CFR 60.675(c)(1) and 40 CFR 60 Subpart 000 Table 3 an initial Reference Method 9 observation of all affected units for Boilers 51 and 52 must be completed in accordance with Condition 7.7.7(a).
- f. Upon written request by the Illinois EPA, such observation shall be conducted for specific affected unit(s) not later than 45 calendar days after the Permittee has received the request or on such later date agreed to by the Illinois EPA.
- g. For each set of observations required by Conditions 7.7.7(d) or (e), the Permittee shall notify the Illinois EPA at least 7 days in advance of the date of the first observation(s).
- h. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observation(s), if Illinois EPA personnel are present.

7.7.8 Observation and Inspection Requirements

- a. Pursuant to 40 CFR 60.674(c), the Permittee must conduct quarterly 30-minute visible emission inspections using Reference Method 22 of the affected storage silos and weigh hoppers while these affect units are operating. The test is successful if no visible emissions are observed.
- b. Pursuant to 40 CFR 60.674(c) if visible emissions are observed when conducting an inspection required by Condition 7.7.8(a), the Permittee must initiate corrective action within 24 hours to return the

affected storage silo or weight hopper to normal operation.

7.7.9 Recordkeeping Requirements

- a. The Permittee shall maintain records containing the following information for the affected units, pursuant to Sections 39.5(7) (a) and (e) of the Act:
 - i. The maximum operating capacity of each affected unit (tons/hr).
 - ii. Manufacturer/vendor or Permittee developed operating and maintenance procedures.
- b. The Permittee shall maintain a demonstration that confirms that the controls are sufficient to assure compliance with Conditions 7.7.4(b) at the maximum process weight rate at which each affected unit can be operated (tons sorbent/hour), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. This demonstration shall include the information addressed by Condition 7.7.9(a), emission factors for uncontrolled PM emissions, and/or controlled PM emissions published by USEPA or other credible sources.
- c. Pursuant to Construction Permits 10120020 and 10120021, the Permittee shall maintain the following operating records for each sorbent handling facility: [T1]
 - i. Amount of sorbent material received (tons/month and tons/year).
 - ii. Amount of sorbent injected (tons/month and tons/year).
- d. Pursuant to Construction Permits 10120020 and 10120021, the Permittee shall maintain records for the actual emissions of PM, PM₁₀ and PM_{2.5} from each sorbent handling facility (tons/month and tons/year), with supporting calculations. [T1]
- e. Pursuant to 40 CFR 60.675(b) and Section 35.7(a) of the Act, the Permittee must maintain records of each inspection required by Condition 7.7.8(a), including dates of any corrective actions taken as required by Condition 7.7.8(b). The record must include and maintenance/repair activity for the emission units and associated controls.

- f. Pursuant to Section 39.5(7) (a) of the Act, the Permittee shall maintain records of the following for each incident when any affected unit operated without accompanying control measures:
 - i. The date of the incident and identification of the affected unit(s) that were involved.
 - ii. A description of the incident, including the control measure(s) that was not present; the measures taken to minimize and correct deficiencies with chronology; and an explanation of whether the emissions or opacity during the incident exceeded any applicable emission or opacity standard, hourly emission limit or requirement, as listed in Condition 7.7.4 or 7.7.6(b) (ii) or (v).
 - iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.
 - iv. The length of time after the incident was identified that the affected units continued to operate before the control measures were in place or the units were shutdown (to resume operation only after these measures were in place); an explanation of why continued operation was necessary; and, an explanation of why this time was not shorter.
 - v. The estimated total duration of the incident, i.e., the total length of time that the affected units ran without control measures and the estimated amount of sorbent handled during the incident.
 - vi. A discussion of the probable cause of the incident and any preventative measures taken.
- g. Pursuant to Section 39.5(7) (a) of the Act, the Permittee shall keep records for all opacity observations made in accordance with Reference Method 9 for the affected units that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.7.7, or otherwise the identity of the observer, a description of the observations that were made, the operating condition of the affected unit(s), the observed opacity, copies of the raw

data sheets for the observations, and the reason for the opacity observations.

7.7.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for the affected units, as follows. Such notifications shall include a description of each deviation and a discussion of the probable cause of deviation, any corrective actions taken, and any preventative measures taken, pursuant to Section 39.5(7) (f) (ii) of the Act.

- i. The Permittee shall submit written notice to the Illinois EPA within 30 days after any deviation from the relevant applicable requirements in Condition 7.7.4 and 7.7.6(b).
- ii. Within 30 days after the conclusion of an incident in which the Permittee continued to operate an affected unit for more than 12 operating hours after discovering that controls were not present or operating, the Permittee shall submit written notice to the Illinois EPA. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.7.9(f).
- iii. A. Except for events and incidents for which notification or reporting is required by Condition 7.7.10(a)(i) or (ii), all other notifications shall be submitted with the quarterly reports that are submitted for the coal-fired boilers pursuant to Condition 7.1.10-2(a).

B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in prior notifications and reports for such deviations.

- b. Pursuant to 40 CFR 60.676(f) and Section 39.5(7) (a) of the Act, the Permittee shall submit written reports to the Illinois EPA of the results of all observations conducted as required by

Condition 7.7.7 within 30 days of completing such observations.

7.7.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational changes with respect to the affected units without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, or for an activity for which a permit is required pursuant to 35 IAC 201.142.

- a. Operation of additional dust control measures.
- b. Operation of replacement dust control measures that are of equal or greater effectiveness in controlling visible emissions than the measures being replaced, as recognized in a Construction Permit for such measures.

7.7.12 Compliance Procedures

- a. Compliance with Condition 7.7.4 is addressed by the work practices, observations, inspections, and recordkeeping required by Conditions 7.7.6, 7.7.7, 7.7.8, and 7.7.9, respectively.
- b. Compliance with Condition 7.7.6 is addressed by the inspections and recordkeeping required by Conditions 7.7.8, and 7.7.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

7.8 Natural Gas-Fired Auxiliary Boiler 2

7.8.1 Description

The transportable natural gas fired boiler would function as an auxiliary boiler, along with the existing auxiliary boiler (See Permit Section 7.6), when the existing auxiliary boiler is not or may not be able to support the plant, as may occur due to outages of equipment or extreme cold weather. To address such periods, this transportable boiler may be installed on a recurring basis, as provided by Construction Permit 14090020, with different boilers with maximum rated heat input of up to 100 mmBtu/hr being installed.

Note: The description in Condition 7.8.1 is for informational purposes only and implies no limits or constraints.

7.8.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Control Equipment
BLR2	Transportable Natural Gas-Fired Boiler	Low NOx Burners

7.8.3 Applicability Provisions

- a. The "affected boiler" for the purpose of these unit-specific conditions is a boiler described in Conditions 7.8.1 and 7.8.2.

7.8.4 Applicable Emission Standards

- a. Pursuant to 35 IAC 212.123(a), the opacity of the exhaust from the affected boiler shall not exceed 30 percent, except as provided in 35 IAC 212.123(b).
- b. Pursuant to 35 IAC 216.121, the emission of carbon monoxide (CO) from the affected boiler shall not exceed 200 ppm, corrected to 50 percent excess air.
- c. Pursuant to 40 CFR 60.40c(a) and 60.41c, the affected boiler is an affected facility under the federal New Source Performance Standard (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc. As an affected facility, the Permittee must comply with applicable requirements of the NSPS, 40 CFR 60 Subpart De, and related requirements of 40 CFR 60 Subpart A, General Provisions, for the boiler. The Illinois EPA is administering NSPS in Illinois on

behalf of the United States EPA under a delegation agreement.

- d. Pursuant to the NSPS, 40 CFR 60.11(d), at all times the Permittee shall, to the extent practicable, maintain and operate the affected boiler in a manner consistent with good air pollution control practices for minimizing emissions.
- e. Pursuant to 40 CFR 63.7485, because the affected boiler would be installed at a source that is major for its emissions of hazardous air pollutants (HAP), each affected boiler is subject to the federal National Emission Standards for Hazardous Air Pollutants (NESHAP) for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD (the Boiler NESHAP). For each affected unit, the Permittee must comply with applicable requirements of the NESHAP, 40 CFR 63 Subpart DDDDD, and related requirements of 40 CFR 63 Subpart A, General Provisions, for new boilers in the "units designed to burn gas 1 fuel" category.

7.8.5 Non-Applicability Provisions

- a. Each affected boiler is not subject to 40 CFR Part 64, CAM, for any pollutants because the boiler does not use an add-on control device to achieve compliance with an emission limitation or standard.
- b. Pursuant to 40 CFR 60.42c and 60.43c, the affected boiler is not subject to any emission standard under 40 CFR 60 Subpart D because the affected boiler only burns natural gas.
- c. Pursuant to 35 IAC 217.340, the affected boiler is not subject to 35 IAC 217 Subpart M for Electric Generating Units because the affected boiler will not meet the definition of EGU under 35 IAC 217.340.
- d. Pursuant to 35 IAC 217.454, the affected boiler is not subject to the requirements of 35 IAC 217 Subpart U because maximum design heat input of affected boiler is less than 250 mmBtu/hour.

7.8.6 Work Practices, Operational Limits and Emission Limits

- a. Pursuant to Construction Permit 14090020: [T1]
 - i. Natural gas shall be the only fuel fired in the affected boiler.

- ii. The maximum design heat input capacity of the affected boiler shall not exceed 100.0 mmBtu/hour.
- iii. The affected boiler shall not operate for more than 3,333 hours/year.
- iv. The Permittee shall at all times maintain and operate each affected boiler in a manner consistent with good air pollution control practice for minimizing emissions.
- v. The design steady-state NO_x emission rate of the affected boiler, as specified by the manufacturer or supplier, shall not exceed 0.04 pounds/mmBtu.
- vi. The short term and annual emissions from the affected boiler shall not exceed the following limits.

Pollutant	Limits	
	lb/hr	tons/year
NO _x	4.0*	6.7
CO	11.0	18.4
PM/PM ₁₀	0.7	1.2

*This limit does not apply during startup of the boiler

- vii. The total emissions of VOM from the affected boiler shall not exceed 0.9 tons/year.
- viii. The total emissions of SO₂ from the affected boiler shall not exceed 0.1 tons/year.
- ix. Compliance with the annual limits set by Conditions 7.8.6(b)(iii), (vi), (vii) and (viii) shall be determined from a running total of 12 months of data.
- b. Pursuant to 40 CFR 63.7540(a) (10) and (13) and Table 3 of 40 CFR 63 Subpart DDDDD, the Permittee shall conduct annual tune-ups of the affected boiler as specified in 40 CFR 63.7540(a) (10) (i) through (vi).

7.8.7 Testing

Pursuant to Section 39.5(7)(a), the Permittee shall obtain certification of the maximum rates of emission of NO_x and CO for any transportable boiler installed under this section of the permit for the purpose of reporting actual emissions.

7.8.8 Opacity Observation and Testing Requirements

- a. The Permittee shall have the opacity of the emissions from the affected boiler during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7) (d) of the Act.
 - i. On each boiler within the first 7 days of initial operation unless the boiler is removed from service within this period.
 - ii. Upon written request by the Illinois EPA, such testing shall be conducted within 7 calendar days of the request, or on the date that the affected boiler next operates, or on the date agreed upon by the Illinois EPA, whichever is later.
- b. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are not greater than 10.0 percent.
- c. For each set of observations required by Conditions 7.6.7(a) (i) and (ii), the Permittee shall notify the Illinois EPA at least 5 days in advance of the date of the first observations. This notification shall include the name and employer of the observer(s) and identify any concerns for successful completion of observations, i.e., lack of suitable point for proper observation or inability to conduct observations under specified operating conditions. This condition supersedes the requirements of Condition 8.6.2.
- d. The Permittee shall notify the Illinois EPA of any changes in the date of the observations.
- e. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observations, if Illinois EPA personnel are present.
- f. The Permittee shall submit a written report for this testing within 15 days of the date of testing. This report shall include relevant information specified in Condition 8.6.3 and the following information:
 - i. Summary of results.
 - ii. Name of certified observer(s), copy of their current certification(s), and name of employer.

- iii. Description of observation location and meteorological conditions.
- iv. Detailed description of the operating conditions of the affected boiler during the observations, including fuel consumption (scf/hr) and firing rate (mmBtu/hr).
- g. Pursuant to Construction Permit 14090020, upon written notification by the Illinois EPA, the Permittee shall have emission testing conducted for the NOx and CO emissions of the affected boiler the next time that an affected boiler is installed at the plant and the expected duration of operation is more than 30 days, with such testing conducted before the affected boiler is removed or within one year whichever occurs first.
[T1]

7.8.9 Recordkeeping Requirements

The Permittee shall maintain the following records for the affected boiler, pursuant to Sections 39.5(7) (a) and (e) of the Act:

- a. A register containing the following information for the affected boiler installed at the plant: manufacturer, model number, serial number, rated heat input capacity, reason(s) for installation, date installed and date removed from the plant.
- b. Records for the operation of the affected boiler, including:
 - i. Hours of operation (hours/month and hours/year).
 - ii. Fuel usage (scf/month and scf/year).
- c. Records for the affected boiler that, at a minimum, include the following information:
 - i. Information that shows that the affected boiler complied with the design and operational requirements of Condition 7.8.6(a) (i) through (v).
 - ii. Information for any incident in which the operation of the affected boiler continued during malfunction or breakdown. These records shall include the date, time and duration of the incident; a description of the incident; whether emissions exceeded or may have exceeded any applicable standard; a description of the corrective actions taken to reduce emissions;

and a description of any preventative actions taken.

- d. Records related to the emissions of NO_x, CO and PM/PM₁₀/PM_{2.5} of the affected boilers:
 - i. A file containing the maximum hourly emission rates (lbs/hour and, for NO_x, lbs/mmBtu), with supporting data and calculations.
 - ii. Other data, not addressed by the above records, used or relied upon by the Permittee to determine emissions.
 - iii. Emissions of each pollutant (tons/month and tons/year), with supporting calculations.
- e. Records for all opacity observations made in accordance with Reference Method 9 for the affected boiler that the Permittee conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.8.8(a), or otherwise the identity of the observer, a description of the observations that were made, the operating condition of the boiler, the observed opacity, and copies of the raw data sheets for the observations.
- f. Pursuant to 40 CFR 63.7555(a)(1), a copy of each notification and report that the Permittee submitted to comply with the 40 CFR 63 Subpart DDDDD, including all documentation supporting any initial notification or notification of compliance status, according to the requirements in 40 CFR 63.10(b) (2) (xiv) .
- g. Pursuant to 40 CFR 63.7555(a)(2), records for annual tune-ups of the affected boiler required by Condition 7.8.6(b).

7.8.10 Reporting Requirements

a. Reporting of Deviations

For the affected boiler, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as follows. These notifications shall include a description of such deviations, including whether they occurred during startup or malfunction/breakdown, and a discussion of the probable cause of such deviations, any corrective

actions taken and any preventative measures taken [Sections 39.5(7) (a) and (f) of the Act].

i. The Permittee shall submit written notice to the Illinois EPA within 30 days after any deviation from the relevant applicable requirement in Conditions 7.8.4 and 7.8.6.

ii. A. The Permittee shall undertake reporting with the quarterly reports required for the coal-fired boilers by Condition 7.1.10-2(a) for deviations from the work practice requirements, and recordkeeping requirements.

B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported in writing to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in the initial notifications and reports for such deviations.

b. Pursuant to Construction Permit 14090020, the Permittee shall notify the Illinois EPA whenever the affected boiler is installed at the plant. This notification shall be submitted prior to beginning operation of such boiler and includes a description of the reason why the boiler would be installed, the planned date of installation and the expected duration of operation. [T1]

c. Pursuant to the 40 CFR 63 Subpart DDDDD, the Permittee shall submit the compliance reports as specified in 40 CFR 63.7550(c) and the deviation reports as specified in 40 CFR 63.7550(d), as applicable to the affected boiler.

d. Pursuant to 40 CFR 63.7545(a) and (c), the Permittee shall submit all the notifications including the initial notifications to the Illinois EPA as, and by the dates specified in 40 CFR 63.7, 63.8 and 63.9, as applicable to the affected boiler.

7.8.11 Compliance Procedures

a. Compliance with the opacity limit in Condition 7.8.4(a) is addressed by the observations and recordkeeping requirements of Conditions 7.8.8(a) and 7.8.9(e), respectively.

- b. Compliance with the CO limit of Condition 7.8.4(b) is addressed by the testing and recordkeeping required by Conditions 7.8.7 and 7.8.9, respectively.
- c. Compliance with the work practices, fuel restriction, operational limits and emission rate limits required by Condition 7.8.6(a)(i-v) is addressed by the recordkeeping required by Condition 7.8.9.
- d. Compliance with the emission limitations required by Condition 7.8.6(a) (vi-viii) is addressed by the testing and recordkeeping required by Conditions 7.8.7, and 7.8.9, respectively.
- e. Compliance with the annual tune-up requirement in Condition 7.8.6(b) is addressed by the recordkeeping and reporting required by Condition 7.8.9(g) and 7.8.10(c) and (d).

Note: This condition is included in this permit pursuant to Section 39.5 (7) (p) (v) of the Act.

7.9 Portable Direct-Fired Heaters

7.9.1 Description

Portable direct-fired heaters burning liquefied petroleum gas (LPG) with rated heat input capacities greater than 2.5 mmBtu/hour may at times be used during cold weather for the purpose of station heating.

Note: The description in Condition 7.9.1 is for informational purposes only and implies no limits or constraints.

7.9.2 List of Emission Units

Emission Unit	Description
HT1	LPG-fired Heater, 3.8 mmBtu/hr
HT2	LPG-fired Heater, 3.8 mmBtu/hr
HT3	LPG-fired Heater, 3.5 mmBtu/hr
HT5	LPG-fired Heater, 2.8 mmBtu/hr
HT6	LPG-fired Heater, 2.8 mmBtu/hr

7.9.3 Applicability Provisions

- a. The "affected units" for the purpose of these unit-specific conditions are the heaters described in Conditions 7.9.1 and 7.9.2.
- b. The "affected new units" for the purpose of these unit-specific conditions are the two new heaters (HT5 and HT6) addressed by Construction Permit 08110022.

7.9.4 Applicable Emission Standards

- a. Pursuant to 35 IAC 212.123(a), the opacity of the exhaust from each affected unit shall not exceed 30 percent, except as provided in 35 IAC 212.123(b).

7.9.5 Non-Applicability Provisions

- a. The affected units are not subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD. This is because direct-fired space heaters are not boilers or process heaters as defined by CFR 63 Subpart DDDDD.
- b. The affected units are not subject to 40 CFR Part 64, CAM, for any pollutants because these heaters do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.9.6 Operational Limits and Emission Limits

a. Pursuant to Construction Permit 08110022: [T1]

- i. Liquid petroleum gas (LPG) shall be the only fuel fired in the affected new units.
- ii. The rated heat input capacity of each affected new unit shall not exceed 3.0 mmBtu/hour.
- iii. Emissions from the affected new units shall not exceed the following limits. Compliance with the annual limits shall be determined from a running total of 12 months of data.

Pollutant	Limits	
	Lbs/Hr - Each	Tons/Yr - Total
NO _x	0.4	3.6
CO	0.2	2.1

- iv. Emissions of SO₂, VOM and PM from the affected new units shall not exceed 0.44 tons/year for each pollutant.

b. Pursuant to Section 39.5(7) (a) of the Act, the Permittee shall only burn liquid petroleum gas (LPG) in the affected units.

7.9.7 Recordkeeping Requirements

a. The Permittee shall maintain the following records for the affected units, pursuant to Sections 39.5(7)(a) and (e) of the Act:

- i. Maintenance, and repair logs with dates and the nature of such activities for the affected units.
- ii. Records of operating hours (hours/month and hours/year) or total fuel usage (gallons/month and gallons/year).

b. Pursuant to Construction Permit 08110022, the Permittee shall maintain the following additional records for the affected new units: [T1]

- i. A file containing a record of the maximum design heat input capacity of each affected new unit, mmBtu/hour, with supporting documentation.
- ii. Records of emissions of NO_x and CO (tons/month and tons/year), with supporting data and calculations.

7.9.8 Reporting Requirements

- a. The Permittee shall notify the Illinois EPA, of deviations of the affected units with the permit requirements within 30 days of an occurrence. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

7.9.9 Compliance Procedures

- a. Compliance with Condition 7.9.4 is addressed by the fuel and recordkeeping required by Conditions 7.9.6 and 7.9.7, respectively.
- b. Compliance with Condition 7.9.6 is addressed by the recordkeeping required by Condition 7.9.7.

7.10 Coal Additive Handling Facility

7.10.1 Description

The Coal Additive Handling Facility handles dry and liquid materials that are mixed into the coal supply for the coal-fired boilers to make the coal into "refined coal." Refined coal is coal to which dry and/or liquid additives have been added to reduce emissions of NO_x and SO₂ or mercury. To handle dry material, the coal additive handling facility has a pneumatic receiving station and silo controlled by a bin vent baghouse, a pneumatic transfer system and main storage silo controlled by a bin vent baghouse, mechanical conveyors to transfer material from the main storage silo to the two static mixers (located on the two coal conveyors that transfer coal to the bunkers for the boilers) where material is mixed with the coal supply. The Coal Additive Facility is addressed by Construction Permit 15090007 and, as of the issuance date of this CAAPP permit, has not begun operation.

Note: The description in Condition 7.10.1 is for informational purposes only and implies no limits or constraints.

7.10.2 List of Emission Units and Air Pollution Controls

The following is a list of the emission units in the Additive Handling Facility and their associated emission control:

Emission Unit(s)	Controls
Truck Unloading Station and Silo	Bin Vent Filters
Transfer System and Main Silo	Bin Vent Filters
Enclosed Mechanical Conveyors	
Partially Enclosed Static Mixers	

7.10.3 Applicability Provisions

- a. An "affected unit" for the purpose of these unit-specific conditions is an individual process emission unit that handles dry additive, as described in Conditions 7.10.1 and 7.10.2.

7.10.4 Applicable Emission Standards

- a. Each affected unit shall comply with 35 IAC 212.321(a): "no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or

modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of [35 IAC 212.321]." (See also Attachment 1.) Each affected unit, e.g., each unloading station, shall demonstrate compliance individually.

- b. The state standard that addresses fugitive emissions, as defined by 35 IAC 211.2490, of the affected units is set forth in Condition 5.2.2(a).
- c. The state standard that addresses the opacity of the emission of smoke or other particulate matter from the affected units is set forth in Condition 5.2.2(b).

7.10.5 Non-Applicability Provisions

- a. The affected units are not subject to requirements of the federal NSPS for Nonmetallic Mineral Processing Plants, 40 CFR 60 Subpart 000. This is because the affected facilities do not include crushers or grinders so that the Additive Handling Facility is not a "nonmetallic mineral processing plant" as defined by 40 CFR 60.671.
- b. For purposes of the federal NSPS for Coal Preparation Plants, 40 CFR 60 Subpart Y:
 - i. This permit is issued based on the affected mixers not being subject to requirements of this NSPS because these mixers are not "coal processing and conveying equipment" as defined by defined by 40 CFR 60.251.
 - ii. This permit is issued based on the installation of the affected mixers not entailing a modification of the coal conveyors on which they were installed for purposes of this NSPS. This is because the installation of these mixers on the conveyors did not entail a capital expenditure on the conveyors, so is not considered a modification under the NSPS pursuant to 40 CFR 60.14(e) (5).
- c. Pursuant to 40 CFR 64.2(a)(3), the affected units are not subject to 40 CFR Part 64, CAM, for PM. This is because the affected units do not have potential pre-control device PM emissions that equal or exceed the threshold for a major source.

7.10.6 Work Practices, Operational Limits and Emission Limits

- a. At all times, the Permittee shall, to the extent practicable, maintain and operate the affected units, including associated control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. [T1]
- b. Pursuant to Construction Permit 15090007: [T1]
 - i. The amount of dry additives handled by the Additive Handling Facility shall not exceed 5,000 tons/month and 44,514 tons/year.

- ii. The emissions of particulate matter (PM and PM₁₀/PM_{2.5}) from the mechanical conveyors and the mixers shall not exceed the following rates:

Emission Unit(s)	Limits (Lbs/Ton)	
	PM	PM ₁₀ /PM _{2.5}
Conveyors to Mixers on Conveyor H1 and H2	0.0804	0.038
Mixers on Conveyors H1 and H2	0.0804	0.038

- iii. The annual emissions of particulate matter (PM and PM₁₀/PM_{2.5}) from the mechanical conveyors, combined, and the mixers shall not exceed the following limits.

Emission Unit(s)	Limits (Ton/Year)	
	PM	PM ₁₀ /PM _{2.5}
Conveyors to Mixers on Conveyor H1 and H2	1.789	0.85
Mixers on Conveyors H1 and H2	1.789	0.85
Totals	3.58	1.70

- iv. Compliance with the annual limits in Conditions 7.10.6(b)(i) and (iii) shall be determined from a running total of 12 months of data.

7.10.7 Opacity Observation Requirements

- a. The Permittee shall perform visible emissions observations from the affected units during representative operating conditions as follows, pursuant to Construction Permit #15090007.
 - i. For each affected unit, observations shall be conducted not later than 45 days of the initial startup of the Additive Handling Facility. These observations shall be conducted while dry additive is being handled, e.g., dry additive is being transferred to a silo or being applied to coal.

- ii. If visible emissions are present from an affected unit during any of the quarterly observations required in Condition 7.10.8(a)(i), opacity observations shall be conducted on an annual basis using USEPA Method 9.
- iii. The duration of each Method 9 observations shall be not less than 30 minutes.
- iv. Upon written request by the Illinois EPA, such observation shall be conducted for specific affected unit(s) not later than 45 calendar days after the Permittee has received the request or on such later date agreed to by the Illinois EPA.
- v. For each set of observations required by Conditions 7.10.7(a), the Permittee shall notify the Illinois EPA at least 7 days in advance of the date of the first observation(s).
- vi. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observation(s), if Illinois EPA personnel are present.
- vii. The Permittee shall submit a written report for these observations not later than 30 days after the date of completion of each set of opacity observations required by Condition 7.10.7(a). The report shall include a copy of the current Reference Method 9 certification of each observer and identify the observer's current employer. This report shall also include the following for each observation:
 - A. Identification of the affected units for which observations were conducted.
 - B. Date and time of observations.
 - C. Description of observation condition.
 - D. Description of the operating conditions of the affected units.
 - E. Raw data.
 - F. Opacity determinations.
 - G. Conclusions.

7.10.8 Visible Emissions Observations and Inspection Requirements

- a. The Permittee shall have periodic observations conducted for the presence of visible emissions and opacity from the affected units as follows, pursuant to Construction Permit #15090007:
 - i. On a quarterly basis, formal observations for the presence of visible emissions shall be conducted using USEPA Method 22.
 - ii. The Permittee shall conduct observations for visible emissions from affected units in accordance with 35 IAC 212.107.

7.10.9 Recordkeeping Requirements

- a. The Permittee shall maintain records containing the following information for the affected units, pursuant to Sections 39.5(7) (a) and (e) of the Act:
 - i. The maximum operating capacity of each affected unit (tons/hr).
 - ii. Manufacturer/vendor or Permittee developed operating and maintenance procedures.
- b. Pursuant to Construction Permit 15090007, the Permittee shall maintain the following operating records for the Additive Handling Facility:
 - i. The amount of dry additive handled (tons/month and tons/year, by type of additive).
 - ii. The amount of liquid additive handled by the affected facility (gallons/month and gallons/year, by type of additive).
 - iii. The total amount of coal burned in the coal-fired boilers and the amount of coal with additives burned (tons/month and tons/year).
 - iv. Records for periods when the Additive Handling Facility was in service with the beginning and ending dates and reason.
- c. Pursuant to Construction Permit 15090007, The Permittee shall maintain the following records related to the emissions of PM and PM₁₀/PM_{2.5} of the affected units:

- i. A file containing the following data for each unit, with supporting documentation:
 - A. The emission factor(s) used by the Permittee to determine emissions of each pollutant (pound/ton of dry additive handled).
 - B. The maximum hourly emission rate for each pollutant (pounds/hour).
- ii. Records of the actual PM and PM₁₀/PM_{2.5} emissions of each emission unit (tons/month and tons/year), with supporting calculations.
- d. The Permittee shall maintain records for all observations for visible emissions and opacity made in accordance with USEPA Method 9 or 22, for emission units in the affected facility that the Permittee conducts, or that are conducted on its behalf by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the identity of the observer, a description of the various observations that were made, the observed opacity, and copies of the raw data sheets for the observations.
- e. The Permittee shall maintain records for inspections and maintenance/repair activity for the emission units at the affected facility and associated control measures, including the dates and descriptions of such activities.

7.10.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for the affected units, as follows. Such notifications shall include a description of each deviation and a discussion of the probable cause of deviation, any corrective actions taken, and any preventative measures taken, pursuant to Section 39.5(7)(f) (ii) of the Act.

- i. The Permittee shall submit written notice to the Illinois EPA within 30 days after any deviation from the relevant applicable requirements in Condition 7.10.4 and 7.10.6(b).

- ii. Within 30 days after the conclusion of an incident in which the Permittee continued to operate an affected unit for more than 12 operating hours after discovering that controls were not present or operating, the Permittee shall submit written notice to the Illinois EPA.
- iii. A. Except for events and incidents for which notification or reporting is required by Condition 7.10.10(a)(i), all other notifications shall be submitted with the quarterly reports that are submitted for the coal-fired boilers pursuant to Condition 7.1.10-2(a).

B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in prior notifications and reports for such deviations.

7.10.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational changes with respect to the affected units without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7) (a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, or for an activity for which a permit is required pursuant to 35 IAC 201.142.

- a. Operation of additional dust control measures.
- b. Operation of replacement dust control measures that are of equal or greater effectiveness in controlling visible emissions than the measures being replaced, as recognized in a Construction Permit for such measures.

7.10.12 Compliance Procedures

- a. Compliance with Condition 7.10.4 is addressed by the work practices, observations, inspections, and recordkeeping required by Conditions 7.10.6, 7.10.7, 7.10.8, and 7.10.9, respectively.
- b. Compliance with Condition 7.10.6 is addressed by the inspections and recordkeeping required by Conditions 7.10.8, and 7.10.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5 (7) (p) (v) of the Act.

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7) (j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is an affected source under Title IV of the CAA and is subject to requirements pursuant to Title IV of the CAA as specified in Section 6.2 of this permit. To the extent that the federal regulations promulgated under Title IV of the CAA are inconsistent with the requirements of this permit, the federal regulations promulgated under Title IV of the CAA shall take precedence pursuant to Section 39.5(17)(j) of the Act.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o) (vii) of the Act].

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12) (a) (i) of the Act]:

- a. The changes do not violate applicable requirements;

- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;
- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
 - i. Describe the physical or operational change;
 - ii. Identify the schedule for implementing the physical or operational change;
 - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
 - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
 - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the condition of this permit. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Conditions 8.6.3 and 8.6.4.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

Reports summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Illinois EPA every six months as follows, unless more frequent submittal of such reports is required in Section 7 of this permit [Section 39.5(7) (f) of the Act]:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determinations of emissions and operation that are intended to be made, including sampling and monitoring locations;
- e. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

- g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7) (e) (i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests and/or analyses, with raw data and sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

- a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance Section.
- b. As of the date of issuance of this permit, the addresses of the offices that should generally be utilized for the submittal of reports and notifications are as follows:

- i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency
Bureau of Air
Compliance & Enforcement Section (#40)
1021 North Grand Avenue East
Springfield, Illinois 62702

ii. USEPA Region 5 - Air Branch

USEPA (AR - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604

- c. Permit applications should be addressed to the Air Permit Section. As of the date of issuance of this permit, the address of the Air Permit Section is as follows:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
1021 North Grand Avenue East
P.O. Box 19506
Springfield, Illinois 62794-9506

OR

Illinois Environmental Protection Agency
Bureau of Air
Compliance & Enforcement Section (#40)
1021 North Grand Avenue East
Springfield, Illinois 62702

8.7 Title I Conditions

Notwithstanding the expiration date on the first page of this CAAPP permit, Title I conditions in this permit, which are identified by a T1, T1N, or T1R designation, remain in effect until such time as the Illinois EPA takes action to revise or terminate them in accordance with applicable procedures for action on Title I conditions. This is because these conditions either: (a) incorporate conditions of earlier permits that were issued by the Illinois EPA pursuant to authority that includes authority found in Title I of the Clean Air Act (T1 conditions), (b) were newly established in this CAAPP permit pursuant to authority that includes such Title I authority (T1N conditions), or (c) reflect a combination of conditions of such previous permits and revisions to those conditions established in this CAAPP permit (T1R conditions). (See also Condition 1.5.)

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j) (iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance with, or violation of, any applicable requirement to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the Permittee, including, but not limited to, challenging the use of the USEPA's credible evidence rule in the context of any future proceeding consistent with *Clean Air Implementation Project v. EPA*, 150 F3d 1200 (D.C. Circuit 1998).

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or

denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless this permit provides for such continued operation consistent with the Act and applicable Board regulations [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.3 Obligation to Allow Illinois EPA Surveillance

Pursuant to Sections 4(b), 39.5(7)(a), and 39.5(7)(p)(ii) of the Act, upon presentation of credentials and other documents as may be required by law and in accordance with constitutional limitations, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following:

- a. Enter upon the Permittee's premises where the emission unit(s) are located or emissions-related activity is conducted or where records must be kept under the conditions of this permit.
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.
- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control

equipment), practices, or operations regulated or required under this permit.

- d. Sample or monitor any substances or parameters at any location:
 - i. As authorized by the Clean Air Act, at reasonable times, for the purposes of assuring compliance with this CAAPP permit or applicable requirements; or
 - ii. As otherwise authorized the Act.
- e. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

9.4 Fees

The Permittee shall pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7) (o) (vi) of the Act]. Fees shall be paid by check sent to one of the following two addresses:

Illinois Environmental Protection Agency
Fiscal Services Section
1021 North Grand Avenue East
Springfield, IL 62702

OR

Illinois Environmental Protection Agency
Fiscal Services Section
P.O. Box 19276
Springfield, IL 62794-9276

9.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7) (o) (iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12) (b) (iv) of the Act].

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e) (ii) of the Act].
- b. Other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Air Quality Planning Section no later than May 1 of the following year, as required by 35 IAC Part 254 and Section 4(b) of the Act.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7) (p) (v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Illinois EPA, Air Compliance Section. (The addresses for the submittal of these compliance certifications are provided in Condition 8.6.4.)

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

- b. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:

- i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency;

Note: For this purpose, emergency means a situation arising from sudden and reasonably unforeseeable events beyond the control of the source, as further defined by Section 39.5(7)(k)(iv) of the Act.

- ii. The permitted source was at the time being properly operated;
- iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

- iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, revoked, reopened and reissued, or terminated for cause in accordance with applicable provisions of Section 39.5 of the Act. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o) (iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15) (a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the

emission standards or limitations, or other terms or conditions of this permit; and

- d. The Illinois EPA or USEPA determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation and reissuance under Section 39.5(15) of the Act, pursuant to Sections 39.5(5) (e) and (i) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, other portions of this permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and the rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of this CAAPP permit will remain in effect until the issuance of a renewal permit [Sections 39.5(5) (l) and (o) of the Act].

Note: Pursuant to Sections 39.5(5) (h) and (n) of the Act, upon submittal of a timely and complete renewal application, the permitted source may continue to operate until final action is taken by the Illinois EPA on the renewal application, provided, however, that this protection shall cease if the applicant fails to submit any additional information necessary to evaluate or take final action on the renewal application as requested by the Illinois EPA in writing. For a renewal application to be timely, it must be submitted no later than 9 months prior to the date of permit expiration.

9.15 General Authority for the Terms and Conditions of this Permit

The authority for terms and conditions of this permit that do not include a citation for their authority is Section 39.5(7) (a) of the Act, which provides that the Illinois EPA shall include such provisions in a CAAPP permit as are necessary to accomplish the purposes of the Act and to assure compliance with all applicable requirements. Section 39.5(7) (a) of the Act is also another basis of authority for terms and conditions of this permit that do include a specific citation for their authority.

Note: This condition is included in this permit pursuant to Section 39.5(7) (n) of the Act.

10.0 ATTACHMENTS

10.1 Attachment 1 Emissions of Particulate Matter from New Process
Emission Units

35 IAC 212.321 - Process Emission Units for Which Construction or
Modification Commenced On or After April 14, 1972

- a) Except as further provided in this part, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.
- b) Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

- 1) Up to process weight rates of 408 MG/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

- 2) For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

c) Limits for Process Emission Units for Which Construction or Modification Commenced On or After April 14, 1972

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

10.2 Attachment 2 Emissions of Particulate Matter from Existing
Process Emission Units

35 IAC 212.322 - Process Emission Units for Which Construction or
Modification Commenced Prior to April 14, 1972

- a) Except as further provided in this Part, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.
- b) Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

$$E = C + A(P)$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

- 1) For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

- 2) For process weight rates in excess of 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

c) Limits for Process Emission Units for Which Construction or Modification Commenced Prior to April 14, 1972

		Metric	English	
P	E	P	E	
Mg/hr	kg/hr	T/hr	lbs/hr	
0.05	0.27	0.05	0.55	
0.1	0.42	0.10	0.87	
0.2	0.68	0.20	1.40	
0.3	0.89	0.30	1.83	
0.4	1.07	0.40	2.22	
0.5	1.25	0.50	2.58	
0.7	1.56	0.75	3.38	
0.9	1.85	1.00	4.10	
1.8	2.9	2.00	6.52	
2.7	3.9	3.00	8.56	
3.6	4.7	4.00	10.40	
4.5	5.4	5.00	12.00	
9.	8.7	10.00	19.20	
13.	11.1	15.00	25.20	
18.	13.8	20.00	30.50	
23.	16.2	25.00	35.40	
27.2	18.15	30.00	40.00	
32.0	18.8	35.00	41.30	
36.0	19.3	40.00	42.50	
41.0	19.8	45.00	43.60	
45.0	20.2	50.00	44.60	
90.0	23.2	100.00	51.20	
140.0	25.3	150.00	55.40	
180.0	26.5	200.00	58.60	
230.0	27.7	250.00	61.00	
270.0	28.5	300.00	63.10	
320.0	29.4	350.00	64.90	
360.0	30.0	400.00	66.20	
400.0	30.6	450.00	67.70	
454.0	31.3	500.00	69.00	

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

10.3 Attachment 3 Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:

Name:

Official Title:

Telephone No.:

Date Signed:

10.4 Attachment 4 Guidance

The Illinois has prepared guidance for sources on the Clean Air Act Permit Program (CAAPP) that is available on the Internet site maintained by the Illinois EPA, www.epa.state.il.us. This guidance includes instructions on applying for a revision or renewal of the CAAPP permit.

Guidance on Revising A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-revising.pdf

Guidance on Renewing A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-renewing.pdf

The application forms prepared by the Illinois EPA for the CAAPP are also available from the Illinois EPA's Internet site:

www.epa.state.il.us/air/caapp/index.html

These CAAPP application forms should also be used by a CAAPP source when it applies for a construction permit. For this purpose, the appropriate CAAPP application forms and other supporting information, should be accompanied by a completed Application for A Construction Permit Form (CAAPP Form-199).

Application for A Construction Permit Form (CAAPP Form-199):

www.epa.state.il.us/air/caapp/199-caapp.pdf

10.5 Attachment 5 - Acid Rain Program Permit

217-785-1705

ACID RAIN PROGRAM PERMIT

Midwest Generation, LLC

Attn: Dale Green

13082 East Manito Road

Pekin, Illinois 61554-8587

Designated Representative: Dale Green/Station Director

Alternate Designated Representative: Frank Ameo/Senior General Manager

Oris No.: 879

IEPA I.D. No.: 179801AAA

Source/Unit: Powerton Station/Units 51, 52, 61 and 62

Date Received: November 7, 2014

Date Issued: August 8, 2017

Effective Date: January 1, 2015

Expiration Date: October 15, 2020

STATEMENT OF BASIS:

In accordance with Section 39.5(17) if the Illinois Environmental Protection Act and Titles IV and V of the Clean Air Act, the Illinois Environmental Protection Agency is issuing this Acid Rain Program permit, including requested revisions, to Midwest Generation, LLC for its Powerton Generating Station.

SULFUR DIOXIDE (SO₂) ALLOCATIONS AND NITROGEN OXIDES (NO_x) LIMITS FOR EACH AFFECTED UNIT:

UNIT 51	SO ₂ Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73	Years 2016 and Beyond
		8,443
	NO _x Limit	0.86 Lb/mmBtu (Standard Limit for Cyclone Fired Boilers)
UNIT 52	SO ₂ Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73	Years 2016 and Beyond
		8,341
	NO _x Limit	0.86 Lb/mmBtu (Standard Limit for Cyclone Fired Boilers)
UNIT 61	SO ₂ Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73	Years 2016 and Beyond
		8,580
	NO _x Limit	0.86 Lb/mmBtu (Standard Limit for Cyclone Fired Boilers)

UNIT 62	SO ₂ Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73	Years 2016 and Beyond
		8,647
	NO _x Limit	0.86 Lb/mmBtu (Standard Limit for Cyclone Fired Boilers)

PERMIT APPLICATION: The permit application, including the NO_x compliance plan, is attached and incorporated as part of this permit. The owners and operators of this source must comply with the standard requirements and special provisions set forth in the application.

COMMENTS, NOTES, AND JUSTIFICATIONS: This permit contains provisions related to sulfur dioxide (SO₂) emissions and requires the owners and operators to hold SO₂ allowances under the federal Acid Rain Program to account for SO₂ emissions from the affected units. An allowance is a limited authorization to emit up to one ton of SO₂ during or after a specified calendar year. The transfer of allowances to and from a unit account does not necessitate a revision to the unit SO₂ allocations denoted in this permit (See 40 CFR 72.84).

This permit contains provisions related to NO_x emissions requiring affected units to comply with applicable emission limitations for NO_x under the Acid Rain program. Pursuant to 40 CFR 76, the Illinois EPA is approving NO_x standard emission limitation compliance plan for Powerton Units 51, 52, 61, and 62. In addition to the described NO_x compliance plan, Powerton Units 51, 52, 61, and 62 shall comply with all other applicable requirements of 40 CFR Part 76, including, the duty to reapply for a NO_x compliance plan, and requirements covering excess emissions.

This permit does not affect the source's responsibility to meet all other applicable local, state and federal requirements, including state requirements under 35 Ill. Adm. Code Part 217 Subpart V, and 35 Ill. Adm. Code Part 226 which addresses NO_x emissions from Powerton Units 51, 52, 61, and 62.

If you have any questions regarding this permit, please contact the CAAPP Unit at 217/785-1705.

Raymond E. Pilapil ^{INTR} 12/20/19

Raymond E. Pilapil
Manager, Permits Section
Bureau of Air

cc: Cecilia Mijares, USEPA Region V
Dean Hayden, IEPA Region 2

EXHIBIT 5

Dynegy's Written Responses to Questions Received at Hearing

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:

AMENDMENTS TO 35 ILL. ADM.
CODE PARTS 201, 202, AND 212

)
)
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)
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R2023-018
(Rulemaking – Air)

DYNEGY’S RESPONSES TO QUESTIONS RECEIVED AT HEARING

Dynegy Midwest Generation, LLC, Electric Energy Inc., Illinois Power Generating Company, Illinois Power Resources Generating, LLC; and Kincaid Generation, LLC (collectively, “Dynegy”) by their attorneys, ArentFox Schiff LLP, hereby files these responses to certain questions asked of Dynegy at the public hearing held by the Illinois Pollution Control Board (the “Board”) on February 16, 2023.

Question:

On page 13, you state that Dynegy’s proposal provides an alternative averaging period for demonstrating compliance during SMB [startup, malfunction and breakdown] of the specific coal-fired boilers at Newton, Baldwin, and Kincaid generating stations.

26. If [Dynegy has opacity monitoring data from the affected units that illustrate the difference in opacity levels during normal operation and during SMB], please submit such illustrative opacity monitoring data for the affected boilers.

Response:

Average opacity data for calendar year 2022 is illustrative of each coal-fired boiler’s opacity levels during normal operation. In 2022, average opacity for Baldwin boiler 1 was 3%, Baldwin boiler 2 was 3%, Kincaid boilers 1 and 2 (shared stack) was 2%, and Newton boiler 1 was 12%. These averages reflect *all* opacity data recorded from the Continuous Opacity Monitors for 2022—including any excess opacity resulting from startups, malfunctions and breakdowns.

Because excess opacity from SMB events occurs only a very small portion of the time, those events have a negligible impact on the overall annual averages.

Dynegy has enclosed illustrative opacity monitoring data for SMB events in Exhibit A. The first page of Exhibit A presents 6-minute block average opacity data for the Kincaid boilers, which exhaust through a common stack and are monitored by a single continuous opacity monitoring system (“COMS”). Those data begin at 4:00 PM on September 15, 2021, and continue for the following three hours. From 5:42 PM up to 6:48 PM, opacity exceeded 30% (the applicable standard pursuant to 35 Ill. Admin. Code § 212.123(a)) for eleven consecutive 6-minute periods as a result of SMB.

The second page of Exhibit A presents 6-minute block average opacity data from the Newton boiler. Those data begin at 4:00 AM on December 16, 2018, and continue for the following three hours. From 6:06 AM up to 6:42 AM, opacity exceeded 20% (the applicable standard pursuant to 35 Ill. Admin. Code § 212.122(a)) for six consecutive 6-minute periods as a result of SMB.

Notably, the SMB events at Newton and Kincaid resulting in the opacity exceedances in Exhibit A would result in opacity above 20% and 30%, respectively, when viewed on a 3-hour average basis, as described in response to Question 29, below.

While the Baldwin boilers have not exceeded the applicable opacity standard, they have come very close, even though their emissions are controlled by both electrostatic precipitators (“ESPs”) and baghouses. The third page of Exhibit A presents 6-minute opacity data for Baldwin boiler 2 for the 3-hour period beginning at 9:00 AM on December 24, 2022. Four of those 6-minute periods (beginning at 10:06, 11:06, 11:24, and 11:48) recorded average opacity of 30%. While those periods are compliant with the 30% standard, they come very close to exceeding the

standard. None of the data from this three-hour period is flagged as SMB, given that opacity did not exceed the applicable standard. However, the cause of the higher-than-usual opacity may potentially have been a malfunction. These data demonstrate that even units equipped with both ESPs *and* baghouses have the potential to exceed 30% opacity.

Question:

On page 14 of your pre-filed testimony, you note that under Dynegy's proposal compliance "would be accomplished for a given six-minute block period when the Alternative Averaging Period is needed by taking the average opacity measurements from the COMS for those six minutes and the preceding 174 minutes of data."

29. Please provide examples using actual opacity monitoring data prior to startup, malfunction, or breakdown that supports MWG's contention that the proposed 3-hour averaging time would be necessary to meet the 30 percent opacity limitation during SMB.

Response:

Dynegy has enclosed actual opacity monitoring data to support its contention that the proposed 3-hour averaging period would be necessary. Exhibit B provides hourly average opacity data based on the six-minute average data contained in Exhibit A. Each 1-hour block average opacity value reflects the average opacity data for the identified hour. For example, on the first page of Exhibit B, the 1-hour data for "09/15/2021 18" is data for the 60-minute period beginning at 6:00 PM on September 15, 2021 (*i.e.*, 6:00 to 7:00 PM). The 2-hour value reflects the average opacity data for the identified hour and the preceding hour, and the 3-hour value reflects the average opacity data for the identified hour and the preceding two hours.

The Kincaid and Newton 3-hour averages exceed 30% and 20%, respectively. While the Baldwin data does not exceed 30%, these averages come close. These examples show that not only is Dynegy's proposed 3-hour averaging period necessary, but also that it is not always

sufficient. Dynegy selected a 3-hour averaging period in order to align with its Compliance Assurance Monitoring (“CAM”) Plans, even though this means that some events that currently constitute SMB and are authorized under Dynegy’s Clean Air Act Permit Program (“CAAPP”) permits would not qualify for relief under Dynegy’s proposal. This further demonstrates that Dynegy’s proposal is narrower than the current regulations and permit authorizations—both in principle and in practice. Consequently, Dynegy’s proposal would not interfere with any applicable requirement concerning attainment and reasonable further progress.

Dated: March 1, 2023

Respectfully submitted,

Dynegy Midwest Generation, LLC, Electric
Energy, Inc., Illinois Power Generating Company,
Illinois Power Resources Generating, LLC,
Kincaid Generation, LLC

/s/ Joshua R. More
One of its Attorneys

Joshua R. More
Sarah L. Lode
ARENTFOX SCHIFF LLP
233 South Wacker Drive, Suite 7100
Chicago, Illinois 60606
(312) 258-5500
Joshua.More@afslaw.com
Sarah.Lode@afslaw.com

Andrew N. Sawula
ARENTFOX SCHIFF LLP
One Westminister Place, Suite 200
Lake Forest, Illinois 60045
(847) 295-4336
Andrew.Sawula@afslaw.com

CERTIFICATE OF SERVICE

I, the undersigned, certify that on this 1st day of March, 2023:

I have electronically served true and correct copies of Dynegy's Responses to Questions Received at Hearing by electronically filing with the Clerk of the Illinois Pollution Control Board and by e-mail upon each person listed in the attached service list.

My e-mail address is Sarah.Lode@afslaw.com.

The number of pages in the e-mail transmission is 15.

The e-mail transmission took place before 5:00 p.m.

/s/ Sarah L. Lode

Sarah L. Lode

Dated: March 1, 2023

Joshua R. More
Sarah L. Lode
ARENTFOX SCHIFF LLP
233 South Wacker Drive, Suite 7100
Chicago, Illinois 60606
(312) 258-5500
Joshua.More@afslaw.com
Sarah.Lode@afslaw.com

Andrew N. Sawula
ARENTFOX SCHIFF LLP
One Westminster Place, Suite 200
Lake Forest, Illinois 60045
(847) 295-4336
Andrew.Sawula@afslaw.com

SERVICE LIST	
Illinois Pollution Control Board Don Brown don.brown@illinois.gov 100 W. Randolph St. Suite 11-500 Chicago, IL 60601	Illinois Environmental Protection Agency Charles E. Matoesian charles.matoesian@illinois.gov Dana Vetterhoffer dana.vetterhoffer@illinois.gov 1021 North Grand Avenue East P.O. Box 19276 Springfield, IL 62794
Office of the Attorney General Molly Kordas molly.kordas@ilag.gov Ann Marie A. Hanohano annmarie.hanohano@ilag.gov 69 West Washington Street, Suite 1800 Chicago, IL 60602 Jason E. James Jason.James@ilag.gov 201 West Point Drive, Suite 7 Belleville, IL 62226	Illinois Department of Natural Resources Renee Snow - General Counsel renee.snow@illinois.gov One Natural Resources Way Springfield, IL 62702
IERG Kelly Thompson kthompson@ierg.org 215 E. Adams St. Springfield, IL 62701	HeplerBroom LLC Melissa S. Brown Melissa.brown@heplerbroom.com Alec Messina Alex.Messina@heplerbroom.com 4340 Acer Grove Drive Springfield, IL 62711
Faith E. Bugel fbugel@gmail.com 1004 Mohawk Rd. Wilmette, IL 60091	Environmental Law and Policy Center Cantrell Jones CJones@elpc.org 35 E. Wacker Drive, Suite 1600 Chicago, IL 60601
Greater Chicago Legal Clinic, Inc. Keith I. Harley kharley@kentlaw.edu 211 West Wacker Drive, Suite 750 Chicago, IL 60606	McDermott, Will & Emery Mark A. Bilut mbilut@mwe.com 227 West Monroe Street Chicago, IL 60606-5096
USEPA – Region 5 Michael Leslie leslie.michael@epa.gov Ralph H. Metcalfe Federal Building 77 West Jackson Blvd. Chicago, IL 60604	

EXHIBIT A

Date/Time	KINCAID Opacity % 6-min Block Average
9/15/2021 16:00	1
9/15/2021 16:06	1
9/15/2021 16:12	1
9/15/2021 16:18	1
9/15/2021 16:24	1
9/15/2021 16:30	1
9/15/2021 16:36	1
9/15/2021 16:42	1
9/15/2021 16:48	1
9/15/2021 16:54	1
9/15/2021 17:00	1
9/15/2021 17:06	1
9/15/2021 17:12	2
9/15/2021 17:18	1
9/15/2021 17:24	1
9/15/2021 17:30	1
9/15/2021 17:36	1
9/15/2021 17:42	43
9/15/2021 17:48	89
9/15/2021 17:54	91
9/15/2021 18:00	86
9/15/2021 18:06	86
9/15/2021 18:12	85
9/15/2021 18:18	83
9/15/2021 18:24	87
9/15/2021 18:30	85
9/15/2021 18:36	90
9/15/2021 18:42	78
9/15/2021 18:48	5
9/15/2021 18:54	4

Date/Hour	NEWTON 1 Oacity % 6-min Block Average
12/16/2018 4:00	10
12/16/2018 4:06	9
12/16/2018 4:12	13
12/16/2018 4:18	12
12/16/2018 4:24	12
12/16/2018 4:30	14
12/16/2018 4:36	16
12/16/2018 4:42	15
12/16/2018 4:48	14
12/16/2018 4:54	12
12/16/2018 5:00	11
12/16/2018 5:06	14
12/16/2018 5:12	12
12/16/2018 5:18	12
12/16/2018 5:24	13
12/16/2018 5:30	12
12/16/2018 5:36	15
12/16/2018 5:42	13
12/16/2018 5:48	12
12/16/2018 5:54	13
12/16/2018 6:00	14
12/16/2018 6:06	30
12/16/2018 6:12	78
12/16/2018 6:18	100
12/16/2018 6:24	89
12/16/2018 6:30	43
12/16/2018 6:36	22
12/16/2018 6:42	18
12/16/2018 6:48	7
12/16/2018 6:54	7

Date/Hour	Baldwin 2 Opacity % 6-min Block Average
12/24/2022 9:00	18
12/24/2022 9:06	20
12/24/2022 9:12	21
12/24/2022 9:18	23
12/24/2022 9:24	24
12/24/2022 9:30	25
12/24/2022 9:36	27
12/24/2022 9:42	26
12/24/2022 9:48	27
12/24/2022 9:54	28
12/24/2022 10:00	27
12/24/2022 10:06	30
12/24/2022 10:12	27
12/24/2022 10:18	28
12/24/2022 10:24	29
12/24/2022 10:30	26
12/24/2022 10:36	23
12/24/2022 10:42	24
12/24/2022 10:48	24
12/24/2022 10:54	25
12/24/2022 11:00	26
12/24/2022 11:06	30
12/24/2022 11:12	29
12/24/2022 11:18	29
12/24/2022 11:24	30
12/24/2022 11:30	28
12/24/2022 11:36	28
12/24/2022 11:42	29
12/24/2022 11:48	30
12/24/2022 11:54	28

EXHIBIT B

Electronic Filing: Received, Clerk's Office 03/01/2023

Date/Hour	KINCAID Opacity % 1-hr Average
09/15/2021 18	69

Date/Hour	KINCAID Opacity % 2-hr Average
09/15/2021 18	46

Date/Hour	KINCAID Opacity % 3-hr Average
09/15/2021 18	31

Electronic Filing: Received, Clerk's Office 03/01/2023

Date/Hour	NEWTON 1 Opacity % 1-hr Average
12/16/2018 06	41

Date/Hour	NEWTON 1 Opacity % 2-hr Average
12/16/2018 06	27

Date/Hour	NEWTON 1 Opacity % 3-hr Average
12/16/2018 06	22

Electronic Filing: Received, Clerk's Office 03/01/2023

Date/Time	BALDWIN 2 Opacity % 1-hr Average
12/24/2022 11	29

Date/Time	BALDWIN 2 Opacity % 2-hr Average
12/24/2022 11	28

Date/Time	BALDWIN 2 Opacity % 3-hr Average
12/24/2022 11	26

EXHIBIT 6

MWG's Written Responses to Questions Received at Hearing

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:

AMENDMENTS TO 35 ILL. ADM.
CODE PARTS 201, 202, AND 212

)
)
)
)
)
)
)
)

R2023-018
(Rulemaking – Air)

MIDWEST GENERATION, LLC’S
RESPONSES TO QUESTIONS RECEIVED AT HEARING

Midwest Generation, LLC (“MWG”) by its attorneys, ArentFox Schiff LLP, hereby files these responses to certain questions asked of MWG at the public hearing held by the Illinois Pollution Control Board (the “Board”) on February 16, 2023.

Question:

On page 1 of your pre-filed testimony, you state that MWG’s proposal provides an alternative averaging period for demonstrating compliance during times of startup, malfunction, and breakdown (SMB) of the coal-fired boilers at Midwest Generation’s Powerton Generating Station.

- 8. If [MWG has opacity monitoring data from Powerton station that illustrate the difference in opacity levels during normal operation and during SMB], please submit this illustrative opacity monitoring data for the affected boilers.**

Response:

Powerton Generating Station (“Powerton”) has four coal-fired boilers, supplying steam to two electrical generators. Boilers 51 and 52 serve one generator (Unit 5), and boilers 61 and 62 power the other generator (Unit 6). Emissions from all four boilers exhaust through a common stack, and opacity of the combined exhaust is measured by a Continuous Opacity Monitoring System (“COMS”).

Opacity monitoring data for these boilers illustrating the difference in opacity levels during normal operation and during SMB are presented in Exhibits A, B, and C. These data are presented

in a matrix format for days that provide examples of normal operation (no excess opacity), malfunctions that led to excess opacity, and startups that led to excess opacity. Data are presented in a matrix format, in which each row represents a single hour, and each column represents a 6-minute period within that hour. For example, the period for “0” hours and “0-5” minutes represents the data beginning at 12:00 AM up to (but not including) 12:06 AM. Average opacity data for each period is presented as an average as measured by the COMS.

Exhibit A presents opacity data from three days (June 18, 2022, August 8, 2022, and November 19, 2022) that represent normal operation. There were no boiler startups, shutdowns, or opacity exceeding 30% on those days. For additional context regarding opacity during normal operation, note that the average opacity during calendar year 2021, using all valid 6-minute averages, was 7.29%, and the average for calendar year 2022 was 8.65%.

Exhibit B presents opacity data from three days (June 14, 2020, May 12, 2021, and April 30, 2022) during which at least one boiler had a startup that resulted in opacity exceeding 30%. Note that excess opacity does not occur with every boiler startup.

Exhibit C presents opacity data from three days (April 4, 2022, April 8, 2022, and August 9, 2022) during which malfunction resulted in opacity exceeding 30%. Note that excess opacity does not occur with every boiler or control equipment malfunction.

Question:

On page 7 of your pre-filed testimony, you note that under MWG’s proposal, demonstrating compliance “would be accomplished for a given six-minute block period when the Alternative Averaging Period is needed by taking the average opacity measurements from the COMS for those six minutes and the preceding 174 minutes of data.”

- 14. Please provide examples using actual opacity monitoring data prior to startup, malfunction, or breakdown that support MWG’s contention that the proposed 3-hour averaging time would be necessary to meet the 30 percent opacity limitation during SMB.**

Response:

The data presented support the need for the proposed alternative averaging period. For example, Exhibit B includes a 6-minute opacity exceedance beginning at 13:00 on April 30, 2022, during which opacity averaged 34.56%. A 12-minute averaging period (adding the preceding 6-minute average to the 34.56% value) results in an even higher average of 35.58%. An 18-minute averaging period (*i.e.*, taking the average of the 13:00 period and the preceding two 6-minute block periods) also exceeds 30%. The same is true for the exceedance presented in Exhibit C for the 6-minute period beginning at 2:42 AM on August 9, 2022, during which opacity measured 32.39%.

Notably, these are just two examples of the need for a longer averaging period. Excess opacity events may last longer or result in higher opacity, thus creating the need for the proposed alternative averaging period. MWG selected a 3-hour averaging period in order to align with its Compliance Assurance Monitoring (“CAM”) Plan. It puts an outside limit on authorized opacity exceedance, in contrast to the current regulations and Powerton’s Clean Air Act Permit Program (“CAAPP”) permit. Consequently, MWG’s proposal would not interfere with any applicable requirement concerning attainment and reasonable further progress.

Dated: March 1, 2023

Respectfully submitted,
Midwest Generation, LLC

/s/ Andrew N. Sawula
One of its Attorneys

Sarah L. Lode
ARENTFOX SCHIFF LLP
233 South Wacker Drive, Suite 7100
Chicago, Illinois 60606
(312) 258-5500
Sarah.Lode@afslaw.com

Andrew N. Sawula
ARENTFOX SCHIFF LLP
One Westminister Place, Suite 200
Lake Forest, Illinois 60045
(847) 295-4336
Andrew.Sawula@afslaw.com

Attorneys for Midwest Generation, LLC

CERTIFICATE OF SERVICE

I, the undersigned, certify that on this 1st day of March, 2023:

I have electronically served true and correct copies of Midwest Generation, LLC's Responses to Questions Received at Hearing by electronically filing with the Clerk of the Illinois Pollution Control Board and by e-mail upon each person listed in the attached service list.

My e-mail address is Sarah.Lode@afslaw.com.

The number of pages in the e-mail transmission is 18.

The e-mail transmission took place before 5:00 p.m.

/s/ Sarah L. Lode

Sarah L. Lode

Dated: March 1, 2023

Sarah L. Lode
ARENTFOX SCHIFF LLP
233 South Wacker Drive, Suite 7100
Chicago, Illinois 60606
(312) 258-5500
Sarah.Lode@afslaw.com

Andrew N. Sawula
ARENTFOX SCHIFF LLP
One Westminster Place, Suite 200
Lake Forest, Illinois 60045
(847) 295-4336
Andrew.Sawula@afslaw.com

SERVICE LIST	
Illinois Pollution Control Board Don Brown don.brown@illinois.gov 100 W. Randolph St. Suite 11-500 Chicago, IL 60601	Illinois Environmental Protection Agency Charles E. Matoesian charles.matoesian@illinois.gov Dana Vetterhoffer dana.vetterhoffer@illinois.gov 1021 North Grand Avenue East P.O. Box 19276 Springfield, IL 62794
Office of the Attorney General Molly Kordas molly.kordas@ilag.gov Ann Marie A. Hanohano annmarie.hanohano@ilag.gov 69 West Washington Street, Suite 1800 Chicago, IL 60602 Jason E. James Jason.James@ilag.gov 201 West Point Drive, Suite 7 Belleville, IL 62226	Illinois Department of Natural Resources Renee Snow - General Counsel renee.snow@illinois.gov One Natural Resources Way Springfield, IL 62702
IERG Kelly Thompson kthompson@ierg.org 215 E. Adams St. Springfield, IL 62701	HeplerBroom LLC Melissa S. Brown Melissa.brown@heplerbroom.com Alec Messina Alex.Messina@heplerbroom.com 4340 Acer Grove Drive Springfield, IL 62711
Faith E. Bugel fbugel@gmail.com 1004 Mohawk Rd. Wilmette, IL 60091	Environmental Law and Policy Center Cantrell Jones CJones@elpc.org 35 E. Wacker Drive, Suite 1600 Chicago, IL 60601
Greater Chicago Legal Clinic, Inc. Keith I. Harley kharley@kentlaw.edu 211 West Wacker Drive, Suite 750 Chicago, IL 60606	McDermott, Will & Emery Mark A. Bilut mbilut@mwe.com 227 West Monroe Street Chicago, IL 60606-5096
USEPA – Region 5 Michael Leslie leslie.michael@epa.gov Ralph H. Metcalfe Federal Building 77 West Jackson Blvd. Chicago, IL 60604	

EXHIBIT A

Opacity Matrix

Plant: Powerton

Source: POWERTON

Parameter: 6-Minute OPACINST

Report Period: 06/18/2022 00:00 Through 06/18/2022 23:59 Time Online Criteria: 1

		0-5	6-11	12-17	18-23	24-29	30-35	36-41	42-47	48-53	54-59
06/18/22	0	8.47	8.72	8.93	9.30	8.24	8.87	8.52	8.11	7.86	8.05
	1	8.58	8.43	8.19	8.55	8.25	7.77	7.83	8.16	8.65	8.21
	2	8.08	8.22	8.02	7.81	7.71	8.49	8.06	8.03	7.97	7.81
	3	7.86	7.85	7.99	8.96	7.92	8.38	7.85	7.75	8.15	7.79
	4	8.30	7.79	8.22	8.00	7.42	7.54	7.96	8.13	8.12	7.97
	5	8.05	7.69	7.62	7.63	7.59	11.09 IC	8.16 IC	8.05	7.79	7.70
	6	7.67	7.47	8.09	8.56	7.83	8.06	7.95	7.60	7.61	7.64
	7	8.75	8.02	8.06	7.85	7.65	7.67	7.61	8.23	7.92	7.82
	8	7.93	7.58	7.67	7.54	8.03	8.30	7.70	7.89	7.76	7.26
	9	7.37	7.72	8.10	8.01	7.63	7.80	7.74	7.68	7.71	7.67
	10	8.05	7.63	7.65	7.50	7.54	7.77	7.57	7.87	7.79	7.65
	11	7.58	7.41	7.51	7.50	7.65	7.89	7.57	7.48	7.37	7.45
	12	7.33	7.55	7.66	7.54	7.43	7.39	7.41	7.11	7.21	7.57
	13	7.88	7.58	7.45	7.55	7.36	7.44	7.46	7.64	7.60	7.39
	14	7.49	7.34	7.16	7.17	7.53	7.67	7.38	7.50	7.45	7.29
	15	7.19	7.36	7.64	7.58	7.60	7.40	7.27	7.49	7.71	7.53
	16	7.64	7.72	7.59	7.56	7.48	7.46	7.55	7.72	7.87	7.60
	17	7.65	7.44	7.53	7.48	7.57	7.70	7.71	7.50	7.61	7.47
	18	7.43	7.45	7.90	7.79	7.42	7.74	7.55	7.62	7.63	7.87
	19	7.83	7.60	7.37	7.45	7.48	7.50	7.69	7.85	7.77	7.59
	20	7.40	7.31	7.38	7.89	7.65	7.89	8.18	7.65	7.49	7.22
	21	7.50	7.71	7.74	8.17	7.64	7.70	7.48	7.60	7.65	7.93
	22	8.06	7.66	7.66	7.68	7.50	7.51	7.72	7.89	8.01	7.53
	23	7.60	7.66	7.58	7.69	7.51	7.96	7.79	7.49	7.91	7.52

F = Offline

I = Invalid

T = Out of Control

E = Exceedance

M = Maintenance

C = Calibration

* = Suspect

Greater > 30.49

Opacity Matrix

Plant: Powerton

Source: POWERTON

Parameter: 6-Minute OPACINST

Report Period: 08/08/2022 00:00 Through 08/08/2022 23:59 Time Online Criteria: 1

		0-5	6-11	12-17	18-23	24-29	30-35	36-41	42-47	48-53	54-59
08/08/22	0	8.54	7.62	8.43	8.06	7.58	7.21	7.09	7.24	7.66	7.25
	1	6.77	6.73	6.77	6.66	6.64	7.04	7.28	7.01	6.17	6.16
	2	6.30	6.10	6.20	6.42	6.30	6.73	6.62	6.46	6.07	6.17
	3	6.58	6.48	7.21	7.96	8.19	7.95	7.29	7.50	6.98	6.48
	4	6.58	6.57	7.00	7.70	7.50	8.72	8.52	8.35	8.83	9.20
	5	10.01	9.91	11.33	9.55	9.73	11.48 IC	10.45 IC	12.98	12.52	13.42
	6	16.89	13.58	14.61	12.27	12.70	15.07	13.49	12.06	10.93	10.39
	7	10.14	9.76	10.49	11.08	11.83	12.30	13.01	15.18	16.79	13.38
	8	13.21	12.45	14.63	14.08	11.93	11.48	12.06	13.25	13.75	12.25
	9	12.23	11.72	12.90	14.45	13.28	13.97	12.48	12.97	13.85	13.34
	10	13.06	13.24	13.66	13.91	13.32	13.63	14.00	14.14	13.07	12.71
	11	13.20	12.89	13.85	12.62	11.40	13.33	15.34	14.86	14.34	12.85
	12	15.89	12.66	14.67	13.82	13.30	13.89	13.59	14.43	13.67	13.57
	13	13.39	11.97	12.12	12.05	10.80	10.99	11.44	9.73	9.36	9.57
	14	10.40	9.34	9.30	8.67	9.15	8.56	9.13	9.53	9.77	8.73
	15	8.85	9.18	10.24	9.90	9.37	9.51	9.62	10.10	9.07	9.65
	16	9.42	8.62	9.18	8.87	8.50	8.18	8.24	8.65	9.13	8.91
	17	9.70	9.45	9.30	8.59	7.72	7.89	7.64	7.26	6.95	6.94
	18	7.07	7.43	7.66	7.02	7.34	7.18	7.08	6.99	6.76	6.83
	19	7.12	7.17	6.97	7.31	6.78	6.57	6.73	6.94	7.67	6.59
	20	6.60	6.69	6.88	6.86	6.98	7.28	7.46	7.88	7.62	7.36
	21	7.39	7.44	8.12	9.32	9.46	9.45	9.70	9.59	9.85	9.93
	22	9.32	8.01	9.71	8.56	7.99	7.68	7.98	7.63	7.25	8.28
	23	8.44	8.32	7.75	8.78	8.24	7.85	7.48	7.33	7.01	7.08

F = Offline

I = Invalid

T = Out of Control

E = Exceedance

M = Maintenance

C = Calibration

* = Suspect

Greater > 30.49

Opacity Matrix

Plant: Powerton

Source: POWERTON

Parameter: 6-Minute OPACINST

Report Period: 11/19/2022 00:00 Through 11/19/2022 23:59 Time Online Criteria: 1

		0-5	6-11	12-17	18-23	24-29	30-35	36-41	42-47	48-53	54-59
11/19/22	0	10.41	9.95	9.88	10.72	13.77	10.24	8.99	10.01	9.65	9.60
	1	9.64	10.46	12.42	9.60	9.16	9.62	9.53	10.30	11.04	11.38
	2	11.31	9.94	9.11	9.20	9.32	10.34	11.10	9.93	10.85	11.08
	3	9.76	11.31	10.94	9.70	10.53	8.88	9.28	9.41	8.64	8.99
	4	7.70	10.53	10.58	9.50	8.50	10.75	9.67	8.74	8.60	9.56
	5	8.20	8.11	7.50	10.38	9.64	11.40 IC	10.26 IC	12.04	9.92	9.80
	6	9.03	10.29	9.64	10.08	10.14	9.66	9.08	10.51	10.60	10.19
	7	9.84	9.75	8.98	8.60	9.94	9.70	10.41	9.28	10.82	9.63
	8	8.01	8.99	8.91	8.05	8.55	7.91	9.85	7.57	8.48	7.60
	9	7.35	7.70	8.21	8.54	9.35	8.89	8.24	7.90	8.34	7.13
	10	7.10	8.87	9.00	8.14	7.11	7.18	7.16	6.53	7.21	8.81
	11	7.65	8.00	7.56	7.74	7.22	7.19	8.29	7.24	6.96	7.31
	12	6.66	6.44	6.16	6.81	6.85	6.14	6.88	7.84	6.57	6.24
	13	6.58	6.73	6.12	6.25	6.45	6.77	6.54	6.94	6.69	6.31
	14	6.04	6.01	6.24	6.79	7.07	6.28	6.87	6.69	6.61	6.47
	15	7.04	7.77	8.10	7.97	7.78	7.54	7.38	7.76	8.04	7.52
	16	8.12	7.53	6.78	7.12	7.21	7.71	6.76	6.67	9.14	7.64
	17	7.28	7.41	8.18	8.24	7.57	8.66	10.10	9.22	8.73	9.45
	18	9.24	8.18	8.29	10.21	9.49	10.34	10.23	9.94	9.72	8.96
	19	9.20	9.99	9.84	11.41	9.95	9.29	10.24	9.62	9.95	8.52
	20	8.99	10.11	8.67	8.94	8.99	10.45	9.85	9.22	9.10	9.72
	21	9.59	8.08	8.91	10.32	9.42	9.13	9.36	9.95	10.57	7.92
	22	8.24	8.66	8.24	7.12	7.23	7.80	9.15	7.51	8.57	8.11
	23	7.66	7.67	7.64	8.16	9.78	10.82	9.65	9.33	10.02	9.56

F = Offline

I = Invalid

T = Out of Control

E = Exceedance

M = Maintenance

C = Calibration

* = Suspect

Greater > 30.49

EXHIBIT B

Opacity Matrix

Plant: Powerton

Source: POWERTON

Parameter: 6-Minute OPACINST

Report Period: 06/14/2020 00:00 Through 06/14/2020 23:59 Time Online Criteria: 1

		0-5	6-11	12-17	18-23	24-29	30-35	36-41	42-47	48-53	54-59
06/14/20	0	10.31	13.54	10.25	10.25	11.33	10.90	10.88	13.28	14.39	14.11
	1	13.53	13.50	13.33	13.32	12.52	12.32	12.16	12.70	14.02	18.09
	2	20.04	22.70	22.95	30.65 E	22.18	21.55	21.21	23.63	19.08	22.47
	3	21.75	23.99	24.02	22.15	19.03	17.84	20.13	18.29	16.68	18.85
	4	17.95	16.48	17.86	15.01	13.36	14.99	15.03	15.80	19.12	17.69
	5	14.58	13.94	13.51	14.10	14.35	12.79 IC	14.72 IC	14.12	14.17	14.04
	6	12.00	12.41	13.76	13.59	13.17	13.13	11.79	13.20	12.80	12.49
	7	12.68	12.67	12.80	12.43	14.42	13.37	13.80	14.12	13.47	14.56
	8	16.39	15.29	14.26	14.94	14.95	14.32	14.96	15.03	14.27	13.70
	9	13.24	12.77	12.48	13.03	12.60	11.94	12.58	12.75	12.69	12.87
	10	12.57	12.51	12.81	12.57	12.65	12.59	12.52	12.02	12.01	12.12
	11	11.66	11.33	11.44	11.38	11.55	11.32	11.21	11.50	11.29	11.42
	12	11.53	11.84	12.44	12.16	11.39	11.46	11.30	11.71	11.72	12.13
	13	12.80	12.24	12.16	11.84	11.48	11.23	11.18	10.88	10.69	10.79
	14	11.13	11.53	11.48	11.45	11.94	11.85	11.88	11.92	11.84	11.29
	15	11.53	11.41	11.27	11.61	11.59	11.37	11.71	12.22	11.45	11.42
	16	11.53	11.25	11.59	11.67	11.69	11.40	11.32	11.61	11.51	11.39
	17	11.31	10.96	10.73	10.70	10.72	10.79	10.68	10.48	10.56	10.90
	18	10.82	11.15	11.48	11.32	11.54	11.64	11.51	11.56	12.22	11.94
	19	11.45	11.50	11.43	11.54	11.70	11.43	11.69	11.67	11.99	11.99
	20	12.11	12.45	12.42	12.12	12.50	12.29	11.82	12.35	12.72	12.10
	21	12.30	12.68	12.74	12.81	12.88	12.92	13.21	13.31	13.87	12.91
	22	13.14	12.21	12.79	11.90 F	9.19 F	7.92	8.17	8.15	7.48	7.39
	23	7.55	7.70	7.19	6.97	7.19	7.19	9.73	11.02	9.26	8.42

F = Offline

I = Invalid

T = Out of Control

E = Exceedance

M = Maintenance

C = Calibration

* = Suspect

Greater > 30.49

Opacity Matrix

Plant: Powerton

Source: POWERTON

Parameter: 6-Minute OPACINST

Report Period: 05/12/2021 00:00 Through 05/12/2021 23:59 Time Online Criteria: 1

		0-5	6-11	12-17	18-23	24-29	30-35	36-41	42-47	48-53	54-59
05/12/21	0	9.57	17.52	14.09	16.50	14.33	14.67	12.84	11.19	9.03	9.71
	1	9.54	10.24	11.33	10.30	10.31	8.63	9.97	14.47	13.41	14.61
	2	31.80 E	14.25	12.32	12.02	16.14	13.98	11.57	10.36	10.35	11.32
	3	9.32	8.83	9.35	9.64	10.91	9.56	11.11	11.39	9.78	8.66
	4	11.70	9.48	10.65	9.10	10.62	9.78	10.07	9.37	9.84	10.98
	5	11.97	13.72	13.14	13.26	12.58	12.41 IC	13.87 IC	15.47	16.78	21.20
	6	18.56	19.15	19.12	19.48	18.40	18.16	21.07	19.57	16.37	19.57
	7	18.12	15.93	16.39	18.33	21.02	19.61	17.79	18.40	18.08	18.28
	8	17.20	19.72	16.72	17.54	17.65	16.63	19.21	19.08	18.17	20.67
	9	16.38	17.43	20.46	16.80	18.52	18.31	19.13	16.32	16.30	16.09
	10	18.56	15.32	15.52	15.59	17.19	15.42	16.87	17.55	16.51	29.99
	11	25.13	26.54	26.61	26.16	25.72	22.98	20.33	18.28	16.63	14.37
	12	16.14	17.02	16.69	17.56	18.79	16.57	17.77	16.22	16.64	21.19
	13	14.34	14.72	19.53	17.04	19.72	18.18	19.15	19.08	17.72	17.66
	14	18.16	18.36	18.38	20.04	17.98	19.09	19.60	18.20	17.64	15.05
	15	17.80	18.10	19.57	18.44	18.94	17.58	17.54	18.55	17.12	17.16
	16	16.18	14.47	14.81	13.92	14.20	13.21	13.92	15.07	14.52	13.59
	17	17.41	13.73	13.95	13.60	17.81	16.38	16.75	18.34	20.01	18.97
	18	19.09	16.65	16.70	16.28	21.49	18.73	17.68	14.67	18.03	19.28
	19	18.09	23.00	19.37	19.91	18.67	17.65	16.27	16.70	15.27	14.36
	20	14.44	13.45	13.90	14.84	12.47	12.71	12.25	13.61	11.69	10.91
	21	11.06	10.40	11.48	10.47	10.28	10.22	9.98	10.06	10.16	9.92
	22	9.89	10.05	10.47	10.29	10.51	10.32	10.39	10.82	10.57	10.51
	23	10.36	10.31	9.52	10.05	9.57	9.63	9.52	9.83	9.54	10.84

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E = Exceedance

M = Maintenance

C = Calibration

* = Suspect

Greater > 30.49

Opacity Matrix

Plant: Powerton

Source: POWERTON

Parameter: 6-Minute OPACINST

Report Period: 04/30/2022 00:00 Through 04/30/2022 23:59 Time Online Criteria: 1

		0-5	6-11	12-17	18-23	24-29	30-35	36-41	42-47	48-53	54-59
04/30/22	0	4.51 F	4.51 F	4.49 F	4.50 F	4.49 F	4.50 F	4.49 F	4.48 F	4.52 F	4.66 F
	1	4.70 F	4.67 F	4.58 F	4.55 F	4.51 F	4.48 F	4.44 F	4.45 F	4.45 F	4.44 F
	2	4.43 F	4.42 F	4.45 F	4.44 F	4.43 F	4.42 F	4.44 F	4.43 F	4.43 F	4.42 F
	3	4.42 F	4.41 F	4.43 F	4.41 F	4.42 F	4.42 F	4.43 F	4.41 F	4.46 F	4.94 F
	4	4.97 F	4.82 F	5.03 F	5.22 F	5.32 F	4.68 F	4.77 F	4.47 F	4.45 F	4.45 F
	5	4.45 F	4.45 F	4.45 F	4.44 F	4.44 F	10.00 FC	4.41 FC	4.42 F	4.42 F	4.41 F
	6	4.41 F	4.40 F	4.40 F	4.41 F	4.40 F	4.40 F	4.40 F	4.39 F	4.39 F	4.39 F
	7	4.38 F	4.37 F	4.40 F	4.38 F	4.39 F	4.40 F	4.39 F	4.40 F	4.39 F	4.39 F
	8	4.39 F	4.40 F	4.41 F	4.41 F	4.40 F	4.41 F	4.41 F	4.41 F	4.40 F	4.40 F
	9	4.40 F	4.43 F	4.43 F	4.43 F	4.44 F	4.45 F	4.50 F	4.72 F	4.76	4.67 F
	10	4.58 F	4.52 F	4.48 F	4.46 F	4.46 F	4.45 F	4.44 F	4.44 F	4.41 F	4.43 F
	11	4.43 F	4.42 F	4.42 F	4.43 F	4.43 F	4.42 F	4.43 F	4.44 F	4.44 F	4.44 F
	12	4.45 F	4.45 F	4.45 F	4.46 F	4.45 F	4.47 F	4.49	14.77	23.81	36.60 E
	13	34.56 E	16.78	11.84	10.21	8.15	7.09	6.88	6.32	6.06	5.88
	14	5.99	5.62	5.57	5.58	5.26	5.14	5.17	5.14	5.00	5.08
	15	5.14	5.07	4.94	4.91	4.94	5.01	5.11	5.20	4.99	4.71
	16	4.71	4.72	4.68	4.71	4.79	4.80	4.74	4.72	4.75	4.71
	17	4.72	4.74	4.76	4.77	4.75	4.71	4.74	4.71	4.70	4.80
	18	5.60	5.75	6.06	5.86	5.93	5.79	5.90	5.91	5.69	5.63
	19	5.62	5.70	8.49	8.70	8.67	8.96	8.92	9.21	10.28	9.58
	20	8.85	9.46	8.57	7.70	7.59	7.45	7.42	7.36	7.50	7.59
	21	11.81	7.96	7.85	7.97	7.91	7.77	7.49	6.53	6.09	5.96
	22	6.02	5.92	5.87	5.81	5.65	5.39	5.24	5.27	5.17	5.02
	23	5.05	5.09	5.01	4.92	4.86	4.89	4.84	4.84	4.87	4.90

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C = Calibration

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Greater > 30.49

EXHIBIT C

Opacity Matrix

Plant: Powerton

Source: POWERTON

Parameter: 6-Minute OPACINST

Report Period: 04/04/2022 00:00 Through 04/04/2022 23:59 Time Online Criteria: 1

		0-5	6-11	12-17	18-23	24-29	30-35	36-41	42-47	48-53	54-59
04/04/22	0	8.89	9.23	8.75	9.11	11.07	9.08	9.68	8.45	8.27	9.03
	1	8.54	8.20	8.01	8.57	9.33	8.53	11.06	8.89	9.32	9.23
	2	9.08	8.84	9.00	8.33	8.66	8.32	9.09	8.14	8.38	8.32
	3	10.93	8.09	8.33	10.28	9.06	9.03	9.11	11.42	9.61	10.03
	4	9.33	8.75	8.58	8.49	8.61	9.29	10.15	9.66	8.72	8.02
	5	8.01	8.16	8.17	8.39	8.46	11.75 IC	10.12 IC	9.55	8.65	8.68
	6	8.63	10.57	11.17	9.39	10.17	9.27	9.86	10.06	9.26	9.61
	7	8.66	8.71	9.22	8.99	9.35	9.91	10.16	9.17	9.07	10.56
	8	9.26	10.28	9.89	10.35	12.81	11.73	12.33	13.31	11.83	12.33
	9	13.33	13.76	17.06	15.31	16.81	14.39	13.13	14.96	16.49	18.27
	10	17.18	21.18	21.72	18.17	19.28	22.45	21.32	18.41	15.14	18.48
	11	18.88	21.41	20.87	20.02	21.13	21.35	18.81	20.98	19.90	18.00
	12	17.20	17.77	26.12	24.66	20.21	18.52	19.51	18.90	17.18	19.83
	13	18.29	22.92	29.29	24.70	27.97	22.14	22.10	21.31	22.05	19.84
	14	22.67	28.66	23.63	22.14	31.11 E	27.13	25.34	23.63	25.68	23.59
	15	23.05	23.41	23.74	23.31	26.27	23.35	24.49	23.11	22.71	32.97 E
	16	26.57	21.22	19.82	19.58	26.39	21.62	19.95	17.82	23.24	14.45
	17	22.02	21.39	19.16	23.75	19.79	20.82	17.39	29.97	20.94	18.66
	18	19.65	19.24	21.69	23.72	20.31	19.70	20.26	18.73	19.25	20.39
	19	18.97	18.42	18.65	19.72	20.61	19.79	23.02	23.50	16.08	18.90
	20	18.45	20.79	17.41	17.26	15.40	18.59	20.51	26.08	20.14	22.06
	21	19.21	16.02	18.18	19.68	19.98	20.51	20.94	15.36	19.67	15.35
	22	23.38	16.41	20.35	24.23	18.00	17.88	21.03	19.59	17.03	16.67
	23	21.72	24.77	22.16	18.52	15.40	16.99	14.95	19.42	20.82	16.22

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Greater > 30.49

Opacity Matrix

Plant: Powerton

Source: POWERTON

Parameter: 6-Minute OPACINST

Report Period: 04/08/2022 00:00 Through 04/08/2022 23:59 Time Online Criteria: 1

		0-5	6-11	12-17	18-23	24-29	30-35	36-41	42-47	48-53	54-59
04/08/22	0	17.71	19.47	30.43	24.56	22.19	22.38	20.80	22.16	26.05	23.51
	1	19.94	23.98	24.95	22.07	27.24	18.07	21.56	22.63	24.09	23.42
	2	22.25	22.12	21.62	20.56	21.19	26.70	23.04	22.47	18.86	32.75 E
	3	24.89	25.31	22.61	31.10 E	23.70	22.43	14.93	17.13	17.85	17.70
	4	17.88	20.36	19.08	16.59	15.57	16.86	20.43	18.11	21.62	24.03
	5	25.25	18.88	16.47	18.40	16.96	15.00 IC	20.51 IC	19.87	18.85	16.09
	6	19.40	15.13	32.19 E	22.90	18.08	18.35	19.85	15.98	17.40	17.91
	7	22.02	17.91	24.64	19.16	21.84	20.00	18.14	15.67	24.34	21.72
	8	16.54	15.63	15.34	20.84	20.28	17.12	15.49	17.98	14.35	14.24
	9	13.36	15.13	26.45	18.42	19.13	16.11	22.51	14.75	13.90	16.00
	10	18.17	13.53	15.54	13.47	16.28	14.87	16.93	13.70	24.06	13.60
	11	15.22	12.72	12.43	16.27	16.27	17.32	15.09	19.21	15.74	14.85
	12	13.09	12.56	22.56	15.81	16.00	12.82	14.96	11.74	16.51	17.22
	13	18.80	16.84	20.04	20.18	21.41	21.43	19.31	23.03	16.40	24.94
	14	19.95	17.97	18.94	13.78	13.33	13.04	14.69	13.69	12.31	10.29
	15	11.64	11.45	14.19	13.99	13.91	9.35	11.06	9.88	11.52	11.21
	16	12.62	12.01	11.34	14.05	15.06	15.12	14.62	15.87	17.77	15.76
	17	14.74	14.47	16.19	27.48	23.81	18.99	17.13	22.46	23.99	16.54
	18	14.04	16.55	22.98	27.27	17.32	19.50	22.69	17.50	31.24 E	18.86
	19	18.12	16.36	27.71	18.00	18.09	19.96	17.51	18.23	17.14	15.75
	20	16.41	19.88	20.43	20.51	18.07	19.46	19.58	20.00	23.17	16.14
	21	19.95	18.82	24.87	18.76	18.55	15.81	22.32	19.45	17.88	16.11
	22	28.44	17.72	17.29	15.47	17.41	17.17	17.79	22.90	17.26	15.97
	23	17.25	17.91	16.08	22.55	19.04	19.40	17.91	17.00	21.54	14.79

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Opacity Matrix

Plant: Powerton

Source: POWERTON

Parameter: 6-Minute OPACINST

Report Period: 08/09/2022 00:00 Through 08/09/2022 23:59 Time Online Criteria: 1

		0-5	6-11	12-17	18-23	24-29	30-35	36-41	42-47	48-53	54-59
08/09/22	0	6.76	6.58	7.01	8.33	7.47	7.19	7.36	6.40	6.20	6.09
	1	6.59	6.31	6.29	6.30	6.50	6.14	5.96	5.86	5.96	6.15
	2	6.10	5.89	5.89	6.15	5.84	5.96	55.64 E	32.39 E	22.16	16.47
	3	14.69	16.58	15.63	14.47	16.61	22.24	16.28	13.79	9.65	9.96
	4	11.44	11.65	11.06	9.91	11.53	10.29	9.34	10.43	9.99	12.17
	5	10.82	11.09	12.15	12.09	13.25	11.81 IC	12.83 IC	12.30	11.80	12.90
	6	11.79	11.46	12.63	12.16	12.36	13.58	13.14	12.41	10.51	10.67
	7	11.11	11.82	12.32	12.30	12.83	13.01	10.58	9.68	11.15	11.90
	8	10.55	11.25	10.71	9.44	9.26	10.28	10.68	10.91	11.03	11.96
	9	20.82	16.59	13.93	14.44	13.04	12.00	11.09	10.55	11.25	11.49
	10	11.17	10.89	10.79	10.22	9.34	9.83	9.30	9.18	23.02	18.00
	11	17.19	18.04	17.51	17.03	16.87	16.62	18.82	19.81	21.47	20.87
	12	21.59	19.25	19.71	17.96	16.71	17.11	18.00	17.03	17.47	17.54
	13	17.17	16.50	15.81	17.40	15.54	16.11	16.12	20.57	16.55	16.75
	14	15.42	16.02	14.08	15.26	14.72	14.38	15.07	14.75	16.71	13.47
	15	13.54	14.54	16.14	16.37	16.12	20.74	14.29	13.64	13.83	15.22
	16	13.86	13.28	13.75	15.52	14.69	14.61	14.52	15.07	15.04	14.74
	17	15.17	14.97	13.47	13.76	13.68	17.00	15.42	13.31	14.83	14.28
	18	12.80	13.75	15.71	16.17	15.51	15.34	13.94	14.08	16.68	16.20
	19	14.09	13.34	12.57	11.86	10.57	10.83	10.58	9.27	9.53	8.96
	20	9.79	8.12	7.93	11.53	8.99	9.08	8.92	8.59	8.79	7.74
	21	7.51	7.88	10.92	9.90	10.45	14.01	12.37	11.21	10.00	10.47
	22	12.02	11.22	12.79	13.30	11.94	10.41	8.81	8.00	8.04	8.08
	23	8.07	7.48	7.61	8.19	7.28	7.75	9.58	8.50	7.62	7.37

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Greater > 30.49

EXHIBIT 7

Technical Support Document



AGORA ENVIRONMENTAL CONSULTING

TECHNICAL SUPPORT DOCUMENT

for

STATEMENT OF REASONS OF DYNEGY AND MIDWEST GENERATION

In the matter of:

AMENDMENTS TO 35 ILL. ADM. CODE PARTS 201, 202, AND 212

R2023-018A

August 7, 2023

**Stephen K. Norfleet. P.E.
Agora Environmental Consulting**

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I. Summary

Dynegy Midwest Generation, LLC, Illinois Power Generating Company, and Kincaid Generation, LLC (collectively, “Dynegy”), and Midwest Generation, LLC (“MWG”) (together with Dynegy, the “Companies”) asked Agora Environmental Consulting to evaluate the impact of the alternative emission limitations (“AELs”) that they are proposing to address opacity during Startup, Malfunction, and Breakdown (“SMB”) in light of the Illinois Pollution Control Board’s (“IPCB’s”) decision to remove provisions that allow operation during SMB from the Illinois Administrative Code (“IAC”). The proposed AELs would apply to each of the Companies’ remaining coal-fired boilers at the following facilities: Baldwin Energy Complex, I.D. No. 157851AAA (“Baldwin”), located at 10901 Baldwin Road, Baldwin, Illinois (Randolph County); Kincaid Power Station, I.D. No. 021814AAB (“Kincaid”), located on Route 104, four miles west of Kincaid, Illinois (Christian County); Newton Power Station, I.D. No. 079808AAA (“Newton”), located at 6725 North 500th Street, Newton, Illinois (Jasper County); and Powerton Generating Station, I.D. No. 179801AAA (“Powerton”), located at 13082 East Manito Road, Pekin, IL (Tazewell County). While the opacity standards are a small component of the state implementation plan (“SIP”) to address the particulate matter (“PM”) national ambient air quality standards (“NAAQS”), the AELs that the Companies are proposing will provide a large margin of compliance with applicable SIP PM limitations and will not increase PM emissions. Moreover, because the AELs will not result in an increase in allowable emissions of any pollutant (even when compared with allowable emissions under the revised state regulations, following the SMB repeal), they will not negatively impact the State’s ability to attain and maintain compliance with any NAAQS, nor would they negatively affect any prior NAAQS modeling.

Simply put, the proposed AELs will not impact the emissions of any criteria pollutants in a manner that might “interfere with any applicable requirement concerning attainment and reasonable further progress” or other Clean Air Act (“CAA”) requirements that would need to be addressed under CAA § 110(l). In contrast, removal of the SMB provisions without an AEL could trigger operators to terminate startups or malfunctions abruptly and then begin startup all over again, which could have the unintended consequence of increasing emission rates of other pollutants.

II. Background

Historically, emission limits for sources in Illinois have been set based on standards that have been demonstrated to be achievable with the appropriate emission controls under normal operating conditions. See, e.g., Opinion and Order of the Board (Apr. 13, 1972), *In the Matter of: Emission Standards*, R1971-023 (adopting Sections 201.261–201.265 (then Rules 105(b)–(f)) and Section 212.124 (then Rule 202(c))). However, such limits may not be achievable during unusual or transient operation during periods of SMB. The Companies, like many other source operators in Illinois, have relied on permit provisions established pursuant to 35 IAC §§ 201.149, 201.261, and 201.262 to allow them to operate their units with opacity above applicable standards during SMB periods. The authorization under these provisions, commonly referred to as SMB exceptions (see, e.g., 35 IAC § 212.124(a) (“Exceptions” to Visible Emissions Limitations)), requires sources to minimize SMB related emissions or opacity but allows operation above applicable standards during SMB periods.

Now, the IPCB has removed the provisions in the IAC that authorize SMB exceptions. However, the IPCB has not proposed to address the issue that the standards were developed for normal operation and were not designed to address the transient nature of the source emissions and control equipment operation during SMB periods.

To address the issue, the Companies are proposing to continue to use opacity as an indicator of PM control performance and to use the same opacity percent limits that are otherwise applicable to each unit, but simply demonstrate compliance in a manner consistent with their Clean Air Act Permitting Program (“CAAPP”) permits by using three-hour averages during SMB periods. Specifically, the Companies are proposing that for any 6-minute period during SMB for which average opacity exceeds 20% or 30%, as applicable¹, the Companies will demonstrate compliance with that opacity standard during that 6-minute period using a three-hour average based on those 6 minutes and the immediately preceding 174 minutes. The use of a three-hour average opacity value is consistent with the underlying Illinois SIP PM standards as well as the approach that the Companies have used in the compliance assurance monitoring (“CAM”) plans under 40 CFR Part 64 to demonstrate a reasonable assurance of compliance for their coal-fired boilers with the applicable SIP PM standards.

A. Illustrative Examples of Implementations of Proposed AELs

For illustration purposes, suppose Newton Unit 1 has been operating for the past three hours consistently at 15% opacity (under its regular 20% opacity limit) and spikes up to 40% opacity (over its 20% opacity limit) for a six-minute period related to an SMB event. If the six-minute period in question does not occur during SMB, the data would be treated as an exceedance of the 20% standard in 35 IAC § 212.122(a), assuming no other exception applies. Under the proposed AEL, operating above the 20% threshold for a six-minute period during an SMB period

¹ The Newton coal-fired boiler is subject to the 20% standard in 35 IAC § 212.122(a), the Baldwin and Kincaid coal-fired boilers are subject to the 30% standard in 35 IAC § 212.123(a), and the Powerton coal-fired boilers are subject to the 30% standard in 35 IAC § 212.123(a).

would trigger the source to evaluate compliance under the AEL. As shown in Figure 1, the opacity average during the six-minute period in question and the six-minute opacity values measured during the previous 174 minutes is 15.8%, which would be below the 20% limit and deemed allowable under the proposed AEL.

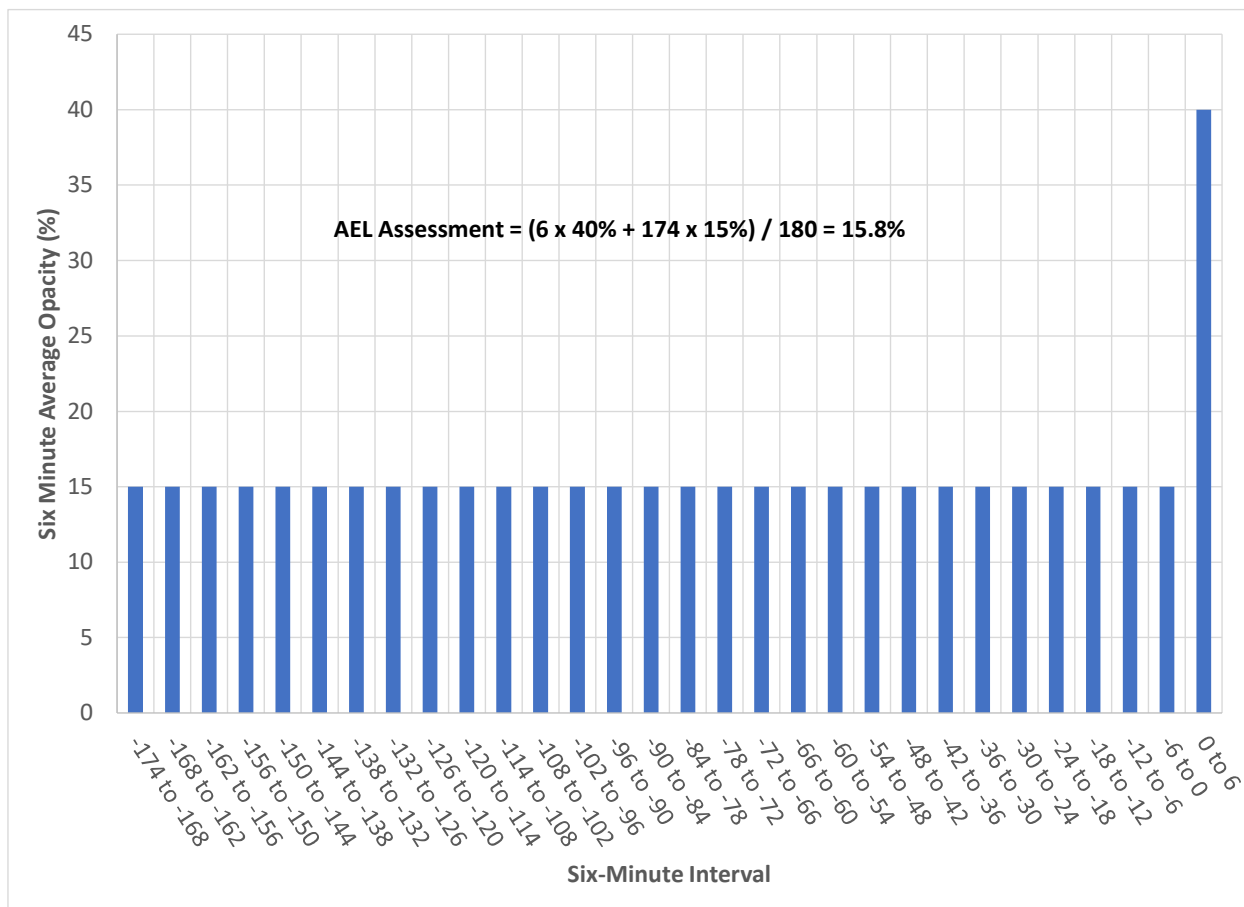


Figure II.1. Newton AEL Example – In Compliance

However, if the opacity spikes higher or lasts for a longer period, a source might also exceed the proposed AEL. For example, suppose again that Newton Unit 1 has been operating consistently at 15% opacity but spikes up to 40% opacity for seven (7) six-minute periods related to an SMB event as shown in Figure 2. The average of that last six-minute opacity value and the previous 174 minutes would be 20.8%, which would be above the 20% limit and considered an exceedance under the proposed AEL.

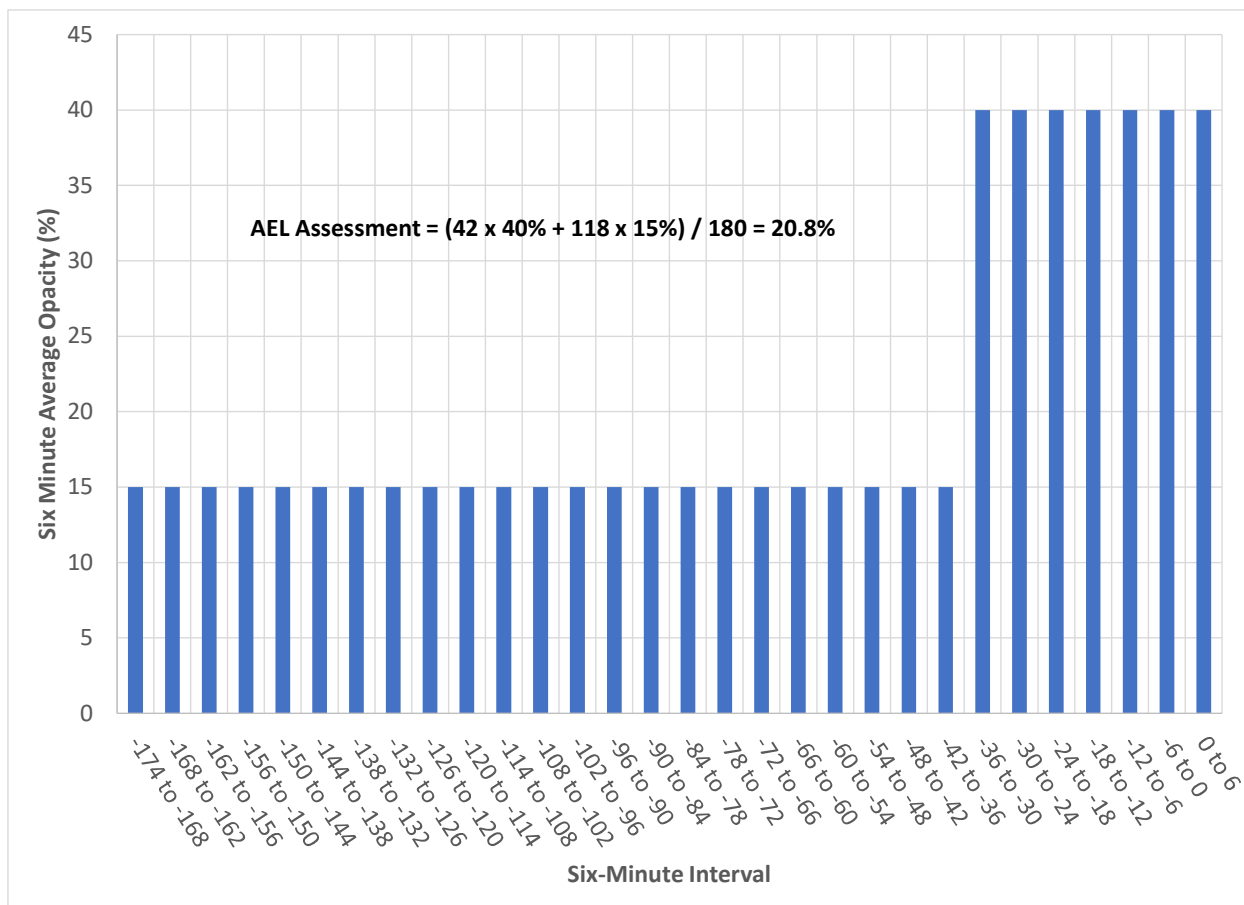


Figure II.2. Newton AEL Example – Exceedance

III. Analysis/Potential Impact

A. Opacity is an Indicator for PM Emissions.

Opacity is not a pollutant or an emission. Rather, it is an *indicator* for PM emissions. As the Illinois Environmental Protection Agency (“IEPA”) explained in its February 27, 2018, Statement of Basis for the Baldwin CAAPP permit:

For purposes of air pollution control, opacity is the degree to which the transmission of light through the exhaust from an emission unit is reduced by the presence of particulate in the exhaust. In simpler terms, it is the “obscuring power” of the exhaust, expressed as a percent. As particulate in the exhaust from an emission unit acts to interfere with the passage of light through that exhaust, the level of opacity from an emission unit is indicative of the level of particulate in the exhaust. Accordingly, opacity readily serves as an indicator of PM emissions and the performance of PM control devices.

B. Agora Developed Unit-Specific PM:Opacity Correlations.

Because opacity is not a pollutant or emissions but an indicator for PM, Agora developed correlations relating the opacity to the PM emissions from each unit to determine whether the AELs will increase PM emissions and to quantify any such increase. This correlation approach is consistent with the technique used by many electric utility sources for the CAM rule under 40 CFR Part 64. The underlying basis for the approach is that the attenuation of light measured by an opacity monitor is a function of Lambert's Law, which can be expressed mathematically by the following equation:

$$O = 1 - e^{\frac{-S_{avg}m_{avg}x}{4}}$$

Where: O = opacity of flue gas
 S_{avg} = specific surface area of the particles (m^2/g)
 m_{avg} = particulate mass concentration (g/Nm^3)
 x = optical path length (m)

Presuming that the particle size distribution and specific surface area of the particles remain relatively similar, the PM concentration will (at least as a first-order approximation) vary proportionally with opacity. Therefore, while opacity is not a direct measurement of PM, it can be used as a surrogate, and using opacity as a CAM indicator for PM is considered presumptively acceptable under §64.3(d) for the purpose of providing a reasonable assurance of compliance under that rule. Presuming the particulate characteristics remain approximately the same, Agora likewise proposes that the opacity and PM correlations serve as a reasonable approach for providing a rough estimate of the potential impact the Companies' AEL will have on PM emissions.

Unit specific opacity to PM correlations are shown in Figures III.1-III.5 for each of the Companies' coal-fired boilers in Illinois based on both EPA Method 5 performance test data and test data collected using the modified version of Method 5 prescribed by the Mercury and Air Toxics Standards ("MATS") Rule. In theory, one might argue that the higher filter temperature associated with the MATS variant of Method 5 Rules could result in lower PM concentration values, but the differences are negligible in practice because there are no significant emissions from the boilers that are condensable between the two temperatures, and the differences between the two methods would be expected to be within the noise of the measurements. However, for Newton Unit 1 and Kincaid Units 1 and 2, the inclusion of the MATS Method 5 data is useful, at least for comparison purposes, because the data illustrate the correlation over a broader range of PM and opacity values.

Notwithstanding this data compatibility, in order to introduce an added layer of conservativeness to my analysis, I analyzed the Method 5 and MATS Method 5 data separately and then selected the data set that yielded the higher PM correlation (that is, the data set that would predict higher PM emissions at a given opacity value) to determine subsequent emission

estimations. In the figures below, the MATS-Method 5 data and associated correlations are shown in blue, and the Method 5 data and associated correlations are shown in orange.

For Newton Unit 1, the correlations were developed from the PM test data collected to develop the unit's CAM plan in 2016 (using MATS Method 5) and Method 5 performance tests conducted in 2019 and 2022, with the recent tests showing much lower PM concentrations. For Kincaid Units 1 and 2, which share a common stack, and for Baldwin Unit 1, the PM correlation was developed based on PM test data performed during the most recent tests conducted to demonstrate compliance with the MATS Rule in 2018 and 2021 and Method 5 performance test data from 2018 and 2020.² For Baldwin Unit 2, the PM correlation was developed based on the PM test data collected in conjunction with the relative response audit ("RRA") and response correlation audit ("RCA") tests that were performed in 2018 – 2022 and Method 5 performance test results from 2018 and 2021. While the PM emissions data from Baldwin Units 1 and 2 generally show more variability, I believe the correlations provide a reasonable approximation for the purpose of this evaluation. For Powerton Units 5 and 6, the PM correlation was developed based on the PM test data collected for the Performance Specification 11 (PS-11) tests performed in 2018 and the most recent RRA test in 2022 (using MATS Method 5) and the CAM test data collected in 2016 (using Method 5).

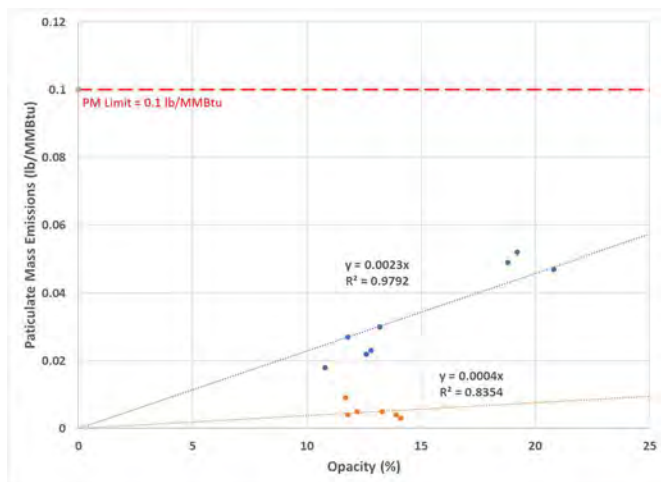


Figure III.1. Newton Unit 1 Opacity vs. PM Correlation

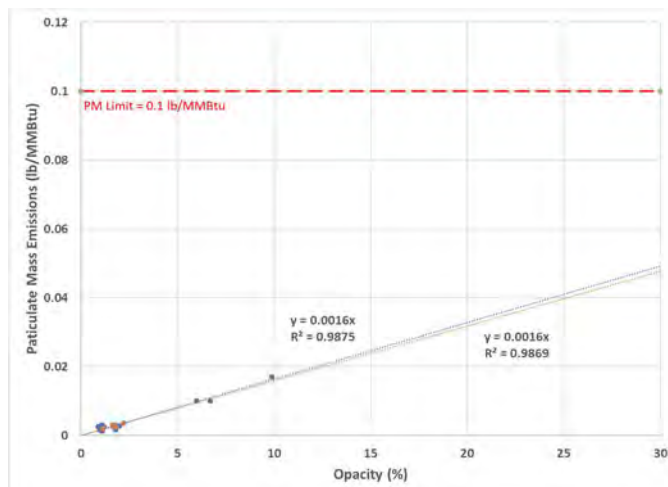


Figure III.2. Kincaid Units 1 and 2 (Common Stack) Opacity vs. PM Correlation

² Baldwin 1 and Kincaid Units 1 and 2 qualify as low emitting electric generating units under the MATS Rule.

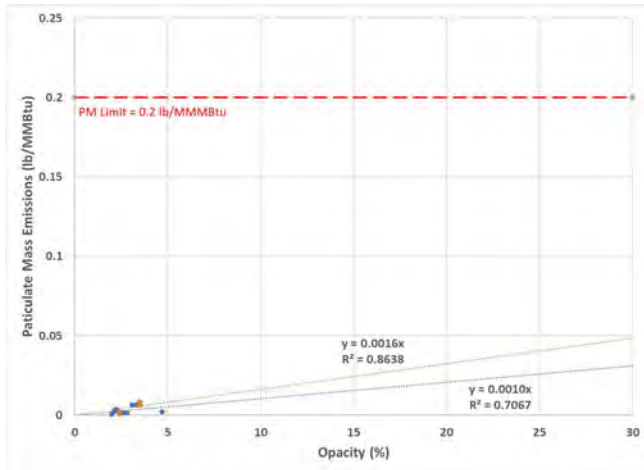


Figure III.3. Baldwin Unit 1 Opacity vs. PM Correlation

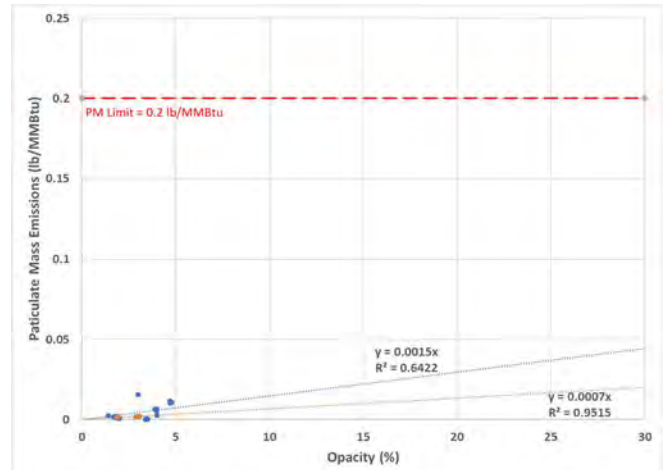


Figure III.4. Baldwin Unit 2 Opacity vs. PM Correlation

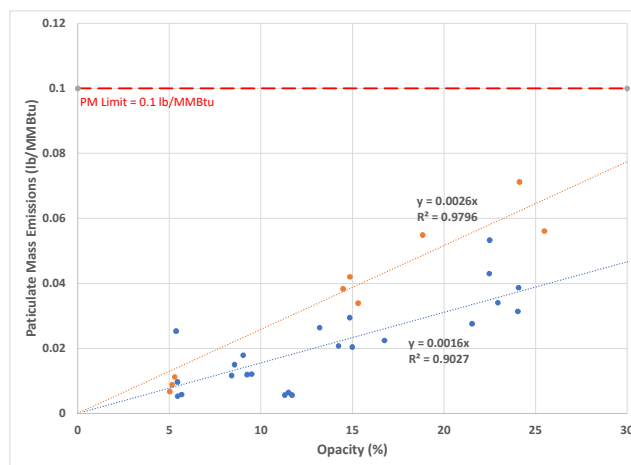


Figure III.5. Baldwin Units 5 and 6 Opacity vs. PM Correlation

C. Proposed AELs are More Stringent than PM Limit.

As illustrated in the preceding figures and shown in Table 1, the correlations (even using the more conservative data set for each boiler—i.e., the data set resulting in a higher estimate of PM emissions) indicate that the PM emissions would be well below the Illinois SIP PM limits even when operating at their opacity limits. The data indicate that Baldwin Units 1 and 2 would be less than a quarter of their SIP PM limit of 0.20 lb/MMBtu when operating at 30% opacity. Kincaid Units 1 and 2 would be about half their SIP PM limit of 0.1 lb/MMBtu when operating at 30% opacity. Newton Unit 1 would be at less than half of its SIP PM limit of 0.1 lb/MMBtu when operating at 20% opacity (or less than 10% of the limit based on a correlation of more recent Method 5 test results). Powerton Units 5 and 6 would be 22% below its SIP PM limit of 0.1 lb/MMBtu when operating at 30% opacity.

A three-hour averaging period for opacity provides the best indication of compliance with the Illinois SIP hourly PM limits. The CAM plans for each of these units utilize three-hour averages

of opacity (rolled on an hourly basis) to assess compliance with the Illinois SIP hourly PM limits. This is because, while the PM limits apply on an hourly basis, “35 IAC 212.110 provides that compliance with the applicable PM standard is based on emissions testing. Since emissions testing for PM includes at least three test runs, each nominally one-hour in duration, this indicates that a three-hour averaging period is an appropriate averaging time for purposes of CAM.”³

Table 1. Estimated PM Emissions at Opacity Limit

	PM Limit⁴	Opacity Limit	PM Correlation⁵ x = % Opacity (lb/MMBtu)	PM Emission Rate at Opacity Limit	% of PM Limit
Baldwin Unit 1	0.20 lb/MMBtu	30%	0.0015x	0.045 lb/MMBtu	23%
Baldwin Unit 2	0.20 lb/MMBtu	30%	0.0016x	0.048 lb/MMBtu	24%
Newton Unit 1	0.1 lb/MMBtu	20%	0.0023x	0.046 lb/MMBtu	46%
Kincaid Units 1&2	0.1 lb/MMBtu	30%	0.0016x	0.048 lb/MMBtu	48%
Powerton Boilers 51/52 and 61/62	0.1 lb/MMBtu	30%	0.0026x	0.078 lb/MMBtu	78%

D. Agora’s Analysis is Consistent with Illinois EPA’s CAM Determinations.

While in some cases the current assessment followed a more conservative approach, the conclusions from the correlation analysis are similar to the determinations made by the State when assessing the CAM plans. The current findings were reached using more recent data,

³ July 14, 2016 Statement of Basis for the Planned Issuance of a Revised Clean Air Act Permit Program (CAAPP) Permit Through Reopening and Significant Modification and a Revised Acid Rain Program Permit for Illinois Power Generating Company Newton Power Station. IEPA provided more detailed explanations for this same conclusion in additional permitting documents. See, e.g., pp.56-58 of the February 27, 2018, Statement of Basis for the Baldwin CAAPP permit.

⁴ Under 35 IAC 212.203 for Baldwin Units 1 and 2, under 35 IAC 212.204 for Newton Unit 1 and Kincaid Units 1 and 2, and under 35 IAC 212.202 for Powerton Boilers 51/52 and 61/62.

⁵ The “PM Correlation” in Table 1 reflects the more conservative of the correlations developed for each unit based on the available Method 5 and MATS Method 5 data as shown in Figures 1-4. Equations in the table represent the relationship between the PM and opacity for each unit based on the respective correlation, where x is the percent opacity (as a numeric value rather than a fraction of 100%). For example, for Baldwin Unit 1, the correlation based on the test data is PM lb/MMBtu = 0.0015(% Opacity). So, at 30% opacity, the estimated PM emission rate would be PM lb/MMBtu = 0.0015(30) = 0.0045 lb/MMBtu.

which suggests consistency in the results. Furthermore, as mentioned previously, although one would expect the differences between Method 5 and the MATS variant of Method 5 to be negligible, our analysis assessed separate correlations for the two methods and used the more conservative of the two.⁶

For its evaluation of CAM indicators for the Illinois SIP PM standards, the state determined in each case that operation at the opacity limit provided a wide margin of compliance with the PM limit and that a reasonable assurance of compliance with the PM standard would be maintained by demonstrating that opacity remained below the limit over an averaging period corresponding to the amount of time needed to conduct a performance test. For Newton, IEPA evaluated Unit 1 and (now retired) Unit 2. IEPA concluded that “the test results indicate that the PM emissions of the boilers at 20 percent opacity are less than 50 percent of the applicable state PM emission limits, i.e., 0.1 lb/mmBtu for each boiler.”⁷ For Kincaid, the IEPA indicated “for the state limit, at 30 percent opacity, the analysis of test results indicates that the compliance margin of the boilers would be approximately 25 percent compared to the applicable emission limit of 0.1.”⁸

For Baldwin Units 1 and 2, the opacity and corresponding PM emissions are typically very low, and the performance test data reflected a very limited range of the potential PM emissions. “To confirm a good correlation between opacity and PM emissions,” Illinois EPA based its determination of the CAM indicator limit for both units on PM test data collected from Unit 2 where the PM was elevated by ash re-injection (a.k.a. “spiking”) during Performance Specification 11 correlation testing.⁹ While the testing range was only about 6% opacity during the elevated PM runs, in conjunction with the PM emissions during performance testing conducted under normal conditions showing a mere fraction of the PM limit (“only about 3.5 percent of the applicable state standard”) at 5% opacity, the Illinois EPA determined it was “reasonable to use 30 percent opacity as the indicator value.”¹⁰

For Powerton boilers 51/52 and 61/62 (comprising Units 5 and 6), PM testing was conducted using low, mid and high opacity values, with test runs ranging from about 5% to 25% opacity. Illinois EPA summarized the results of this testing as follows: “at 30 percent opacity, the analysis of test results indicates that the compliance margin of the boilers would be

⁶ The Method 5 data were higher in two cases and MATS Method 5 data were higher in the other two cases.

⁷ *Statement of Basis for Planned Changes to CAAPP Permit No. 95090066 And Planned Issuance of a Revised Acid Rain Permit.* Newton Power Station, ID No. 079808AAA, July 14, 2016, p. 24.

⁸ *Statement of Basis for Planned Changes to CAAPP Permit No. 95090078 And Planned Issuance of an Acid Rain Permit.* Kincaid Power Station, ID No.: 021814AAB, July 21, 2016, p. 24.

⁹ The use of ash re-injection tends to produce conservative correlation results for opacity or light scattering-based PM CEMS because the ash tends to agglomerate, and the larger particles will create less opacity (or light scattering) for a given mass concentration.

¹⁰ *Statement of Basis for Planned Changes to CAAPP Permit No. 95090026 And Planned Issuance of an Acid Rain Permit.* Baldwin Energy Complex, ID No. 157851AAA, February 27, 2018, p. 54.

approximately 18 percent compared to the applicable emission limit of 0.1 lb/mmBtu.”¹¹

E. The AELs Will Not Result in Higher Allowable Hourly PM Emissions.

The AELs do not change *any* applicable standard or other emission limitation that currently applies to PM or any other pollutant.

As noted above, opacity is an *indicator* for PM emissions, but opacity is not, itself, a pollutant. Nonetheless, as the analysis above shows, the Companies’ proposed AELs are set at a level that assures compliance with the applicable Illinois SIP hourly PM limits—meaning that, when these units operate at 20% or 30% opacity, as applicable, for 3-hour periods, their PM emissions would be lower than (and compliant with) the applicable Illinois SIP PM limits on a lb/MMBtu basis. This conclusion holds true irrespective of whether a three-hour period includes one or more six-minute periods of opacity higher than 20% or 30%, so long as the three-hour opacity average remains at or below 20% or 30%, as applicable.

F. The AELs Will Not Interfere with Attainment, Reasonable Further Progress, or Any Other Clean Air Act Requirement.

The proposed AELs will not impact the emissions of any criteria pollutants in a manner that might “interfere with any applicable requirement concerning attainment and reasonable further progress” or other Clean Air Act (CAA) requirements that would need to be addressed under CAA § 110(l).

While the proposed approach would assess performance for each 6-minute period during SMB events based on a three-hour (180-minute) average of data, the shortest duration PM NAAQS is a 24-hour standard. The State is currently in attainment with the 24-hour and annual PM NAAQS. Since there is no impact on allowable PM on a one-hour basis, let alone a 24-hour or annual basis, the proposed AELs will have no impact on the State’s continued ability to remain in attainment with these PM standards.

The Companies are seeking AELs for only *opacity* during SMB and not for any emissions of any pollutant. In other words, the Companies will not be authorized to exceed any applicable emission limit for any pollutant as a result of promulgating their proposal AELs for opacity. The discussion above illustrates that the proposed alternative for opacity will continue to be an indicator for compliance with the state SIP PM limits and will not have any impact on the PM NAAQS.

Nor will the AELs result in increased emissions of any other criteria pollutant. The PM emissions and associated opacity from the units are controlled via electrostatic precipitators (“ESPs”) and,

¹¹ *Statement of Basis for the Planned Issuance of a Revised CAAPP Permit Through Reopening and Significant Modification*. Powerton Generating Station, ID No. 179801AAA, August 25, 2016, p. 24.

in the case of Baldwin Units 1 and 2, also with fabric filter baghouses. ESPs and baghouses do not affect gaseous pollutants (e.g., VOM, NO_x, SO₂, or CO); consequently, opacity is not correlated with the other gaseous pollutants.¹² For that reason, the AELs will not affect the emissions of any gaseous criteria pollutant, and will have no impact on NAAQS for gaseous pollutants. The only other criteria pollutant is lead. The NAAQS for lead is based on a three-month average of data. Lead is one component of particulate emissions. The AELs would not affect the proportion of lead in the particulates. The relationship between opacity and lead would be limited to the relationship between opacity, on the one hand, and all particulates (including lead), on the other hand. Just as the AELs will not result in any increase in PM emissions, they will not result in any increase in lead emissions. Notably, the Companies are not seeking relief in connection with any limits that apply to those criteria pollutants—or any other pollutants. Thus, there is no concern that the AELs would negatively affect any NAAQS or any other Clean Air Act requirement.

G. Potential Unintended Consequences of Removing SMB Exemptions.

As stated previously, the opacity standards were developed to address normal operation and were not designed in consideration of the unusual or transient events during SMB periods. If the Companies cannot rely on the AELs to allow operation during SMB events, one could envision that the Companies might shut down a unit in the midst of a startup or malfunction in response to short-term opacity exceedances that they cannot immediately resolve by other means. Such a response could force a unit into a repetitious loop of aborted startups, resulting in lost power generation, reduced reliability, and potential damage to the coal-fired boilers. Such operating practices would mean that the boilers would be operating in “startup” mode rather than in regular operation for longer periods of time.

Operating in startup mode for longer periods of time would mean that the boilers would operate with higher NO_x and CO₂ lb/MMBtu emission rates for longer periods of time because those rates are higher during startup than during normal operations. The scenario would increase NO_x emission rates for Baldwin and Kincaid because the ammonia injection for the selective catalytic reduction (“SCR”) systems used to control NO_x on the Baldwin and Kincaid units cannot be engaged until the units reach a critical load/flue gas temperature. If a startup period is extended, NO_x emission rates continue at a higher level for a longer period of time. Likewise, the units are much less efficient at low loads, resulting in higher rates of CO₂ emissions in comparison to heat input or power output than the emission rates during normal operation. To be sure, there are times when a shutdown could be required under the

¹² Conversely, PM can be influenced by dry sorbent injection or scrubber operation. However, in these cases, the operation of the other controls may impact PM rather than the PM affecting the control of the other emissions. On the Companies’ coal-fired boilers in Illinois, the PM controls (ESPs or baghouses) are downstream of the other emission controls, so operation of the upstream devices would not be affected by the PM controls. With dry scrubbers, once the filter cake develops, any additional control by the sorbent material within the baghouse would be expected even during a SMB event that might cause a PM spike.

Companies' proposed AELs; however, the absence of authorization to operate in excess of standards during SMB could greatly increase the frequency of needing to shut down a boiler in response to an unavoidable opacity exceedance.

IV. Conclusions

The evaluation shows that the Companies' proposed AELs will provide a large margin of compliance with applicable Illinois SIP PM standards and will raise no concerns with respect to "attainment and reasonable further progress" or compliance with other CAA requirements under CAA §110(l). Applying the AELs would also avoid the potential unintended consequence of higher NO_x and CO₂ emission rates, loss of reliability, and potential damage to the boilers that could result from increasing the frequency of immediately shutting down a boiler in response to an unavoidable opacity exceedance.

EXHIBIT 8

Declaration of Cynthia Vodopivec

DECLARATION OF CYNTHIA VODOPIVEC
ON BEHALF OF DYNEGY

I, Cynthia Vodopivec, state as follows:

1. I present this Declaration on behalf of Dynegy Midwest Generation, LLC; Illinois Power Generating Company; and Kincaid Generation, L.L.C. (for simplicity of discussion, collectively and individually referred to as “Dynegy”). I am currently employed as Senior Vice President, Environmental Health & Safety at Dynegy. As part of my duties, I oversee permitting and regulatory development and compliance for air, water, and waste issues at Dynegy’s Illinois generating stations, including the Baldwin Energy Complex (“Baldwin”), Kincaid Power Station (“Kincaid”), and Newton Power Station (“Newton”) (collectively, the “Stations”).

2. In this Declaration, I summarize certain control equipment upgrades and operational steps Dynegy has taken to minimize the risk of exceeding the applicable opacity standards in connection with the coal-fired boilers at the Stations (the “Affected Units”). I further explain that Dynegy does not believe it can take any further steps that would eliminate the risk of opacity exceedances during periods of startup, malfunction and breakdown (“SMB”).

3. As articulated in my testimony and Dynegy’s filings in R23-18, PM emissions from the Baldwin Affected Units are controlled by both ESPs and baghouses. Although these controls are state-of-the-art, they do not guarantee that Dynegy can avoid all opacity exceedances from these Affected Units. This risk is evidenced by data Dynegy submitted on March 1, 2023, in response to questions it received at the February 16, 2023 hearing (“Dynegy’s Response”). Exhibit A to Dynegy’s Response presents 6-minute data for Baldwin boiler 2 for a three-hour period on December 24, 2022. Four of those 6-minute periods recorded average opacity of 30%. (*Id.*) While those four periods complied with the applicable 30% opacity standard, they came precariously close to exceeding the standard. This demonstrates that equipping a coal-fired boiler with both an ESP and a baghouse is no guarantee that the boiler could comply with a 30% opacity standard (or a 20% standard) 100% of the time, including during SMB events.

4. The Kincaid and Newton Stations follow startup procedures and take practical measures to minimize opacity during startup. In addition, the Kincaid Affected are subject to a consent decree, entered April 2, 2013, by the U.S. District Court for the Central District of Illinois (the “Decree”). Paragraph 89 of the Decree, which has been incorporated into a construction permit and into the Kincaid Clean Air Act Permitting Program permit, requires “Optimization of ... Existing ESPs.” The required actions include, to the extent practicable, that Dynegy “fully energize each section of the ESP for each Unit ... (regardless of whether those actions are needed to comply with opacity limits); and repair any failed ESP section ... at the next planned Unit outage (or unplanned outage of sufficient length); (b) operate automatic control systems on each ESP to maximize PM collection efficiency, where applicable; ... and (d) inspect for and repair during the next planned Unit outage (or unplanned outage of sufficient length) any openings in ESP ...

casings, ductwork and expansion joints to minimize air leakage.” Dynegy must also “Continuously Operate each PM Control Device on each Unit,” as defined in the Decree.

5. Installing fabric filter baghouses at the Kincaid and Newton Affected Units might have the potential to further reduce opacity, to an extent; however, Dynegy believes it would not eliminate the risk of opacity exceedances during SMB events. Dynegy’s experience with the Baldwin Affected Units supports this conclusion.

6. Moreover, installation of baghouses on the Kincaid and Newton Affected Units would take significant time and expense. Based on Dynegy’s industry experience, Dynegy believes that baghouses would cost tens of millions of dollars at each Station, and would take approximately three years to design, procure and install. That means that baghouses could not help control emissions of particulate matter, and the associated opacity, until late 2026, at the earliest. Notably, Dynegy currently plans to cease operation and retire the Kincaid and Newton Affected Units on or before July 17, 2027, in accordance with the federal CCR Rule. As a result, even if Dynegy took immediate steps to add baghouses to these Affected Units, the baghouses would operate for less than one year.

7. For all these reasons, installing baghouses for the Kincaid and Newton Affected Units is not a realistic or cost effective option, and it would not obviate the need for the relief Dynegy is requesting through its Joint Proposal in R23-18A.

FURTHER, Declarant sayeth not.

Dated: August 7, 2023

/s/ Cynthia Vodopivec
Cynthia Vodopivec

EXHIBIT 9

Declaration of Sharene Shealey

DECLARATION OF SHARENE SHEALEY
ON BEHALF OF MIDWEST GENERATION, LLC

I, Sharene Shealey, state as follows:

1. I am currently employed as a Director, Environmental, for Midwest Generation, LLC's ("Midwest Generation" or "MWG") parent company, NRG Energy. As part of my duties, I am responsible for permitting and regulatory development and compliance for air, water, and waste issues at Midwest Generation's generating stations, including the Powerton Generating Station ("Powerton").

2. In this Declaration, I summarize control equipment upgrades and operational steps Midwest Generation has taken to minimize the risk of an exceedance of the applicable 30% opacity standard under the terms of a court supervised consent decree, and I explain that Midwest Generation does not believe it can take any steps (through installing or upgrading pollution controls, or changing operating practices) that would eliminate the risk of opacity exceedances during periods of startup, malfunction and breakdown ("SMB").

3. On May 10, 2018, the U.S. District Court for the Northern District of Illinois entered a Consent Decree (the "Decree") resolving, among other claims, allegations that emissions from Powerton Units 5 and 6 had exceeded the 30% standard in 35 Ill. Admin. Code § 212.123(a). The United States, the State of Illinois, and Citizens Against Ruining the Environment are all parties to the Decree.

4. The Decree requires that, as of March 9, 2018, Midwest Generation "not operate Powerton Unit 5 unless it has upgraded its ESPs for this Unit as required by this Paragraph." (Decree ¶17) Paragraph 18 of the Decree similarly requires that Powerton Unit 6 not operate without upgraded ESPs meeting specifications prescribed in the Decree. Midwest Generation performed upgrades meeting the requirements of the Decree.

5. Paragraph 21(a) of the Decree requires that, if Unit 5 or 6 "have opacity above 30%, calculated using six-minute averages and subject to the exemptions in 35 IAC 212.123(b) (including exceedances of the 30% limit during periods of Unit startup, shutdown, malfunction and breakdown), for more than 2.5% of the Unit's operating time in any calendar quarter after the first calendar quarter post Effective Date of this Decree, MWG must develop a plan that will recommend any improvements to that Unit's ESP(s) and/or operation to achieve and maintain compliance with the standard set forth in 35 IAC 212.123." This paragraph specifies how the plan would be reviewed, approved, and implemented, and includes certain limitations on the paragraph's requirements, including that the paragraph does "not apply to a unit that operated fewer than 200 hours cumulatively in a calendar quarter." To date, neither Unit 5 nor Unit 6 has triggered the obligation for Midwest Generation to develop such a plan pursuant to Paragraph 21(a).

6. Paragraph 21(b) of the Decree requires that, if Unit 5 or 6 “have opacity above 30%, calculated using six-minute averages and subject to the exemptions in 35 IAC 212.123(b) (including exceedances of the 30% limit during periods of Unit startup, shutdown, malfunction and breakdown), for more than 1.5% of the Unit’s operating time in any calendar year starting with calendar year 2018, MWG must develop a plan that will recommend improvements to that Unit’s ESP(s) and/or operation to achieve and maintain compliance with the standard set forth in 35 IAC 212.123.” This paragraph specifies how the plan would be reviewed, approved, and implemented, and includes certain limitations on the paragraph’s requirements. To date, neither Unit 5 nor Unit 6 has triggered the obligation for Midwest Generation to develop such a plan pursuant to Paragraph 21(b).

7. Paragraph 22 of the Decree specifies detailed operational requirements for the ESPs serving Unit 5 and Unit 6. These requirements require Midwest Generation to operate the ESPs “such that each ESP maximizes opacity and PM emissions reductions and operate each Unit to minimize opacity and PM emissions consistent with the safety, operational, technical, and maintenance limitations of each Unit and ESP.” (Decree ¶22(b)) Paragraph 22 goes on to specify detailed operational requirements, including to “set an alarm trigger at 25 percent opacity (as a six-minute average) to alert operational personnel to take appropriate action to minimize the likelihood of any exceedance of the 30 percent opacity limit.”

8. Notwithstanding Midwest Generation’s rigorous implementation of these and other requirements of the Decree, Powerton Units 5 and 6 still experience occasional, unavoidable opacity exceedances resulting from SMB. As noted, those events account for a lower percentage of time than the thresholds established in Paragraph 21, and thus have not triggered the obligation to recommend additional improvements.

9. As Midwest Generation made clear in its filings in R23-18, Midwest Generation has not identified any improvements that could eliminate the risk of exceedances of the opacity standard during SMB events.

10. Installation and operation of fabric filter baghouses might have the potential to further reduce opacity, to an extent; however, for the reasons articulated in R23-18, including in the Joint Post-Hearing Comment of Dynegy and Midwest Generation (P.C. #14), Midwest Generation does not believe that installation of baghouses would eliminate the risks of opacity exceedances during SMB events. As a result, installation of baghouses would not obviate the need for the relief Midwest Generation is requesting through its Joint Proposal in R23-18A.

11. Based on its experience in the industry, Midwest Generation believes that installation of baghouses for Units 5 and 6 would cost at least tens of millions of dollars, and would take approximately three years to design, procure and install. Thus, even if Midwest Generation installed baghouses, Powerton would be left with a period of two or more years before the baghouses could be online. And the tremendous cost of installing baghouses could not be justified

given the limited years remaining prior to retirement of Units 5 and 6 and the limited further control improvement that baghouses may provide, if any, compared with the controls and operational practices specified in the Decree. Notably, Midwest Generation currently plans to cease operating and retire Units 5 and 6 on or before December 31, 2028.

12. Notably, the Decree, which was agreed to by the State of Illinois, the United States, and CARE, and entered by the federal judge, does not require the installation of baghouses to avoid exceedances of the opacity standard.

FURTHER, Declarant sayeth not.

Dated: August 7, 2023

/s/ Sharene Shealey
Sharene Shealey