

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
AMENDMENTS TO 35 ILL. ADM. CODE) R23-18
PARTS 201, 202, AND 212) (Rulemaking – Air)

NOTICE OF FILING

TO: Don Brown
Clerk
Illinois Pollution Control Board
60 E. Van Buren St., Suite 630
Chicago, Illinois 60605
don.brown@illinois.gov

SEE ATTACHED SERVICE LIST

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Illinois Pollution Board the ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S RESPONSES TO QUESTIONS RECEIVED AT HEARING, a copy of which is herewith served upon you.

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: /s/ Dana Vetterhoffer
Division of Legal Counsel

DATED: January 30, 2023
1021 N. Grand Ave. East
P.O. Box 19276
Springfield, IL 62794-9276
(217) 782-5544

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**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY’S RESPONSES TO
QUESTIONS RECEIVED AT HEARING**

The Illinois Environmental Protection Agency ("Illinois EPA" or "Agency"), by one of its attorneys, hereby files this response to certain questions asked of the Agency at the public hearing held by the Pollution Control Board ("Board") on January 19, 2023.

1. The Illinois Environmental Regulatory Group ("IERG") asked if the Agency would provide examples of more recent permits with startup, malfunction, breakdown ("SMB") language, and include a variety of examples such as Clean Air Act Permit Program ("CAAPP") permits, Federally Enforceable State Operating Permits ("FESOP"), and construction permits, from various timeframes. Transcript at p. 18, line 13. IERG also asked if the Agency was "aware of any operating permits that have emission limits that apply during periods of [SMB] that are different than emission limits that apply during periods of steady state operation." Transcript at p. 83, line 1. Finally, IERG asked if the SMB language has "evolved" over the years and, if so, the basis of the evolution. Transcript p. 18, line 21.

Response: The Agency notes that both the volume of records and the inability to search permits based on particular provisions within them limits its ability to provide the requested information. However, the Agency spoke with staff regarding their recollections. Based on those conversations, the Agency has no recollection of any FESOP sources with SMB language in construction permits. It does not recall specific FESOP operating permits with SMB language; it acknowledges there may be some but believes they are rare. The Agency recalls two requests for SMB language in major source construction permits in the last two years, but both were denied. CAAPP permits sometimes do contain SMB provisions. For example, all coal-fired power plants have SMB provisions. Such permits are publicly available and may be found on the Agency’s website at: <https://external.epa.illinois.gov/DocumentExplorer/Attributes>. The Agency is also providing a response to comments issued by the Agency in a CAAPP permit proceeding, a model CAAPP permit, a Prevention of Significant Deterioration permit, and a CAAPP permit as Agency Attachment 1.

As to the question of whether the Agency’s SMB language has evolved since 1971, to the best of the Agency’s knowledge, the Board’s SMB regulation

establishing that the impact of SMB provisions is an affirmative defense and the Agency's implementation of that language have not changed. However, over time and with experience, the language of SMB permit provisions has been refined and clarified. Some of that clarification is apparent in the documents the Agency is providing, referenced above.

2. IERG asked whether, in proposing the original emission limitations to the Board in R71-23, the Agency took "into consideration" SMB provisions. Transcript at p. 75, line 8. The Agency indicated that it would review the documents available in the Board's docket for such rulemaking.

Response: The Agency reviewed the documents available on the Board's website in R71-23. The Agency is unclear what exactly IERG means by taking SMB provisions "into consideration." There are several documents that discuss SMB provisions, whether by the Board, the Agency, or others who participated in the rulemaking, but whether they fall within the scope of IERG's question is unclear. If there are passages that IERG has specific questions about, the Agency would be happy to answer those if possible.

3. As a follow-up to its question regarding whether, in proposing the original emission standards for CO, NOx, PM, SO2, and VOM to the Board in R71-23, the Agency took into consideration SMB provisions, IERG asked whether the Agency has anything onsite at the Agency's building regarding past notes or drafts concerning the Agency's rulemaking proposal. Transcript pages 75-76.

Response: The Agency reviewed its records on-site and did not identify any documents responsive to this request.

4. Dynegy asked if the Agency had written communications or notes from verbal communications with regulated entities regarding potential alternate standards. Transcript p. 80, line 4.

Response: The Agency's staff have searched for any responsive documents regarding potential alternate standards. The Agency is not providing documents that are attorney-client privileged, attorney work product, predecisional, or that have already been provide to the Board in this rulemaking. While other communications might exist that were not captured by the Agency's search, the Agency provides records marked as Attachment 2.

5. IERG asked the Agency to explain why none of the comments or concerns raised in pre-filing outreach changed the Agency's proposal. Transcript p. 41, Line 17.

Response: Several of the comments regarded issues not directly related to the Agency's proposed language, and thus did not impact the Agency's proposed rule (such as comments regarding the Agency's outreach or filing schedule or use of fast-track rulemaking). Comments that requested alternative standards did not change the

Agency's proposal either. As explained in its Statement of Reasons and again during hearing, without any indication from USEPA that alternative limits will, in practice, be approvable and without additional direction or guidance from USEPA regarding the support necessary to satisfy the criteria set forth in its 2015 SIP Call for alternative limits, it is not advisable to propose or adopt such limits particularly not in this rulemaking considering the August 2023 adoption/submittal/completeness deadline. To the Agency's knowledge, all other states that have successfully addressed the SIP Call have done so by removing SSM provisions from their SIPs, and the states that have developed alternative standards have had such standards rejected by USEPA as insufficient. The Board's SMB regulations do not establish exceptions or exemptions from emission limits; they provide only an affirmative defense. The Agency's proposal does not change existing emission limits or sources' existing obligation to comply with them.

6. With regard to recent renewals of operating permits or revisions to construction permits with SMB language, IERG asked whether there have been no permits recently issued by the Bureau of Air that contain SMB provisions because the permit section is "holding these permits for issuance because. . . their applications contain requests for the SMB provisions." Transcript p. 99, line 16.

Response: There are no construction permits pending that seek SMB provisions. Regarding operating permits, many considerations account for the fact that no permits have been recently issued containing SMB provisions. SMB issues are one of the factors as are environmental justice concerns and Agency resources.

7. IERG asked how the Agency has been handling new requests for SMB provisions and whether there have been no permits recently issued by the Bureau of Air because the permit section is "holding" them because they contain SMB provisions. Transcript p. 100, line 4.

Response: See the Agency's response to Question 6 above.

8. IERG asked if the Agency has ever issued a violation notice for emissions exceeding a generally-applicable standard during an SMB event where the source has an SMB provision in its operating permit. Transcript p. 114, line 9. IERG followed up by asking if the Agency "typically" issues "a violation notice for an exceedance of a generally-applicable standard during a startup, malfunction, or breakdown event" when the source has an SMB provision in its permit. Transcript p. 116, line 11.

Response: The Agency's Compliance Section does not have the ability to search violation notices ("VN") based upon the type of violation. Therefore, the Agency cannot isolate VNs that were issued due to excess emissions from SMB events. Violation notices are fact dependent, and while emissions exceedances during startup or malfunction are always a violation of the regulations, not every violation leads to issuance of a VN (just as with other types of violations). The Agency cannot speak as to who or when a VN was issued for an SMB

exceedance. However, the Agency does believe that some VNs have been issued in the past for SMB exceedances. For the same reasons as set forth above, the Agency cannot say whether the Agency “typically” issues VNs for SMB exceedances. The Agency would note though that, when considering whether to issue a VN for a violation occurring during startup or malfunction, whether the source at issue has SMB provisions in its permit is not a factor considered by the Agency. In other words, the Agency assesses each exceedance based on the facts of the particular situation, regardless of whether a source has SMB permit provisions.

9. IERG asked whether the Agency’s permitting section is authorized to issue an air permit to a source which cannot comply with applicable standards at all times? Transcript p. 156, line 15.

Response: It is generally accepted that the Illinois EPA shall issue a permit upon proof by an applicant that the facility or equipment subject to the Board’s permit requirements will not cause a violation of the Environmental Protection Act or the Board’s regulations. The comment begs the question of whether the applicant is a noncompliant source or a source whose regulatory compliance status is intermittent. The former scenario generally does not result in permit issuance unless it involves a CAAPP source that has submitted an approvable compliance plan and schedule. CAAPP sources that comply only intermittently, rather than continuously, are obliged to report such status as part of their Annual Compliance Certifications, consistent with applicable USEPA guidance regarding the same. It can be noted that USEPA has previously acknowledged that a certification of intermittent compliance is not necessarily indicative of noncompliance.

10. The Chemical Industry Council of Illinois (CICI) asked how many of the 119 CAAPP permits with SMB provisions are chemical companies. Transcript p. 161, line 4.

Response: The Agency is unclear as to what is meant by the term “chemical company.” The Agency conducted a search based on the Standard Industrial Classification Group Code 28 which resulted in 16 sources. However, upon review, no more than 10 of these appeared to be chemical companies based upon how the Agency generally views that term.

11. CICI asked what the process would be to obtain regulatory relief for “industrial processes where the most effective pollution control unit cannot be made operational until said device has reached minimum operating temperature.” Transcript p. 158, line 12.

Response: The Agency directs participants to the Board’s regulations for more detail and specific requirements. Generally though, two forms of longer term regulatory relief are set forth in 35 Ill. Adm. Code Part 104. Subpart B of Part 104 contains the procedures for petitioning for a variance from Board rules. Section 104.202

contains the filing requirements and Section 104.204 contains the required content of the petition. Variances are granted for temporary relief. The term of a variance cannot exceed five years, although a second five-year term may be applied for at the conclusion of the initial variance.

Subpart D of Part 104 contains the provisions for adjusted standards. An adjusted standard has the effect of an environmental regulation that would apply to the applicant, if granted, in lieu of the general regulation. Section 104.406 contains the required content for the petition.

A third option is a site-specific rulemaking. This form of rulemaking follows the path of rulemakings of general applicability in Part 102, but with some additional requirements. The rule language applies only to the named petitioner. Subpart B, Section 102.210 contains the requirements for a proposal for a site-specific rulemaking.

A fourth option is a rulemaking of general applicability. Subpart B, Section 102.202 contains the requirements for a proposal for a rule of general applicability.

By the above response, the Agency is not opining as to the best option for this or other scenarios, and is not determining which option or options, if any, are available for any particular situation.

12. CICI asked how many enforcement actions the Agency initiated to date for excess emissions during startups for sources that have SMB provisions in their permits. Transcript p. 161, line 8.

Response: The Agency's Compliance Section does not have the ability to search VNs based upon the type of violation. Therefore, the Agency cannot isolate VNs that were issued due to excess emissions from startup for sources with permits that contain SMB provisions.

13. The Board asked whether the factors the Board considers for an adjusted standard petition under Section 28.1 of the Environmental Protection Act are appropriate for SMB relief, or if the rule itself should specify certain factors that the Board needs to consider in deciding to grant relief. Transcript p. 159, line 2.

Response: The criteria set forth in Section 28.1(c)(1) through (4) of the Environmental Protection Act should be sufficient when the Board is considering a petition for an adjusted standard from emission limitations during startup or malfunction/breakdown. The criteria includes adequate proof that factors relating to the petitioner are substantially and significantly different from those relied upon in adopting the general regulation, information related to the environmental impact, and a showing that the adjusted standard is consistent with federal law. Any adjusted standard approved by the Board that impacts an emission limitation

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that is SIP approved would need to be submitted to USEPA as a SIP revision, and would be subject to federal approval.

14. The Attorney General's Office asked if Indiana is part of the Midcontinent Independent System Operator network. Transcript p. 173, line 7.

Response: It is. Most of Indiana is served by the MISO regional transmission organization ("RTO"), while some portions of Indiana are served by the PJM RTO. This is also true of Illinois. Most of Illinois' geographical area is served by MISO, with a portion being served by PJM. A map of both RTO areas can be seen at: <https://www.miso-pjm.com/>.

15. The Attorney General's Office asked what the role of environmental justice was in the 2022 USEPA Finding of Failure. Transcript p. 174, line 24.

Response: The Agency attaches the portion of the Finding of Failure titled "Environmental Justice Considerations" as Attachment 3.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: /s/ Dana Vetterhoffer
Division of Legal Counsel

DATED: January 30, 2023
1021 N. Grand Ave. East
P.O. Box 19276
Springfield, IL 62794-9276
(217) 782-5544

CERTIFICATE OF E-MAIL SERVICE

I, the undersigned, on affirmation, state the following:

That I have served the attached ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S
RESPONSES TO QUESTIONS RECEIVED AT HEARING by e-mail upon:

Don Brown
Clerk
Illinois Pollution Control Board
60 E. Van Buren St., Suite 630
Chicago, Illinois 60605
don.brown@illinois.gov

Renee Snow, General Counsel
Department of Natural Resources
Office of General Counsel
One Natural Resources Way
Springfield, Illinois 62702
renee.snow@illinois.gov

Ann Marie A. Hanohano
Assistant Attorney General
Office of the Illinois Attorney General
69 West Washington Street
Suite 1800
Chicago, Illinois 60602
annmarie.hanohano@ilag.gov

Molly Kordas
Assistant Attorney General
Office of the Illinois Attorney General
69 West Washington Street
Suite 1800
Chicago, Illinois 60602
molly.kordas@ilag.gov

Jason E. James
Assistant Attorney General
201 West Point Drive, Suite 7
Belleville, Illinois 62226
jason.james@ilag.gov

Melissa A. Brown
HeplerBroom, LLC
4340 Acer Grove Drive
Springfield, Illinois 62711
melissa.brown@heplerbroom.com

Andrew Sawula
ArentFox Schiff LLP
233 South Wacker Drive Suite 6600
Chicago, Illinois 60606
Chicago, Illinois 60606
andrew.sawula@afslaw.com

Joshua More
Sarah Lode
ArentFox Schiff LLP
233 South Wacker Drive Suite 6600
Chicago, Illinois 60606
joshua.more@afslaw.com
sarah.lode@afslaw.com

Faith E. Bugel
1004 Mohawk Road
Wilmette, Illinois 60091
fbugel@gmail.com

Cantrell Jones
Environmental Law and Policy Center
36 E. Wacker Drive
Suite 1600
Chicago, Illinois 60601
cjones@elpc.org

Electronic Filing: Received, Clerk's Office 01/30/2023

Keith I. Harley
Greater Chicago Legal Clinic, Inc.
211 West Wacker Drive
Suite 750
Chicago, Illinois 60606
kharley@kentlaw.edu

Mark A. Bilut
McDermott, Will & Emery
227 W. Monroe Street
Chicago, Illinois 60606-5096
mbilut@mwe.com

Kelly Thompson
Executive Director
IERG
215 East Adams Street
Springfield, Illinois 62701
kthompson@ierg.org

Tim Fox
Hearing Officer
Illinois Pollution Control Board
60 E. Van Buren St., Suite 630
Chicago, Illinois 60605
tim.fox@illinois.gov

That my e-mail address is dana.vetterhoffer@illinois.gov.

That the number of pages in this e-mail transmission is 9.

That the e-mail transmission took place before 5:00 p.m. on the date of January 30, 2023.

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: /s/ Dana Vetterhoffer
Division of Legal Counsel

DATED: January 30, 2023
1021 N. Grand Ave. East
P.O. Box 19276
Springfield, IL 62794-9276
(217) 782-5544

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF AIR

September 29, 2005

Response to Public Comments
CAAPP Permit Applications for:

Midwest Generation, LLC, Chicago (Crawford) # 95090076
Midwest Generation, LLC Chicago (Fisk) # 95090081
Midwest Generation, LLC, Joliet #95090046
Midwest Generation, LLC, Pekin #95090074
Midwest Generation, Will County (Romeoville) #95090080
Dynergy Midwest Generation, Alton #95090096
Dynergy Midwest Generation, Inc., Baldwin #95090026
Dynergy Midwest Generation, Inc., Havana #95090053
Dynergy Midwest Generation, Inc., Hennepin #95090052
Dynergy Midwest Generation, Inc., Oakwood #95090050
Ameren Energy Generating Co., Bartonville #95070026
Ameren Energy Generating Co., Canton #95070025
Ameren Energy Generating Co., Coffeen #95090009
Ameren Energy Generating Co., Hutsonville #95080105
Ameren Energy Generating Co., Meredosia #95090010
Ameren Energy Generating Co., Newton #95090066
Electric Energy, Inc., Joppa #95090120
Southern Illinois Power Coop, Marion #95090124
Soyland Power Cooperative, Inc., Pearl #95080060
Kincaid Generation, LLC, Kincaid # 95090078
City of Springfield, Springfield #95090091

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CAAPP Permits

The Clean Air Act Permit Program (CAAPP) is Illinois' federally approved operating permit program for major stationary sources of emissions and other sources, as required by Title V of the Clean Air Act. Permits issued under the CAAPP are known as "CAAPP permits." Major stationary and other sources covered by Title V of the Clean Air Act are required to apply for and obtain a CAAPP permit. CAAPP permits must include emissions limitations and standards and other requirements under state and federal environmental laws and regulations and related provisions to assure compliance with applicable requirements. CAAPP permits generally do not impose new substantive requirements. Rather, as previously indicated, these permits provide for, among other things, testing, monitoring, recordkeeping, and reporting (a portion of which may be "new" requirements) to assure compliance with existing state and federal environmental requirements. The conditions of CAAPP permits are enforceable by the public, as well as the state and federal government. CAAPP permit decisions are generally subject to public participation requirements.

Public Participation

In June 2003, in accordance with the CAAPP, the Illinois EPA opened public comment periods on the draft CAAPP permits for the 22 coal-fired power plants listed below:

Midwest Generation, LLC, Chicago (Crawford) # 95090076	Dynegy Midwest Generation, Inc., Havana #95090053
Midwest Generation, LLC Chicago (Fisk) # 95090081	Dynegy Midwest Generation, Inc., Hennepin #95090052
Midwest Generation, LLC, Joliet #95090046	Dynegy Midwest Generation, Inc., Oakwood #95090050
Midwest Generation, LLC, Pekin #95090074	Ameren Energy Generating Co., Bartonville #95070026
Midwest Generation, Will County (Romeoville) #95090080	Ameren Energy Generating Co., Canton#95070025
Midwest Generation, Waukegan #96090047	Ameren Energy Generating Co., Coffeen #95090009
Dynegy Midwest Generation, Alton #95090096	Ameren Energy Generating Co., Hutsonville #95080105
Dynegy Midwest Generation, Inc., Baldwin #95090026	Ameren Energy Generating Co., Meredosia #95090010

Ameren Energy Generating Co., Newton
#95090066

Soyland Power Cooperative, Inc., Pearl
#95080060

Electric Energy, Inc., Joppa
#95090120

Kincaid Generation, LLC, Kincaid
95090078

Southern Illinois Power Coop, Marion
#95090124

City of Springfield, Springfield
#95090091

Due to the significant nature of the 22 coal-fired sources, and based on expressed public interest, the Illinois EPA held six public hearings throughout the state and provided a comment period of approximately 90 days. After the close of the comment period and review of public comments received during this comment period, in October 2003, the Illinois EPA prepared and sent proposed CAAPP permits to USEPA for review.

Based on further consideration and consultation with USEPA, as well as with applicants and interested parties, in December 2004 and again in July 2005, the Illinois EPA distributed drafts of revised proposed permits soliciting comments on the changes that were being contemplated. The Illinois EPA afforded the applicants and persons who had participated in the public process the opportunity to review the drafts of the revised proposed permits.

The Illinois EPA reviewed and responded to all significant comments raised by the public and the applicants during its review of the CAAPP permits. The Illinois EPA provided an opportunity for the applicants and individuals that participated in the original public comment period to review the changes that the Illinois EPA made to the proposed permits and to submit further comments on these changes. Concurrently, the Illinois EPA prepared this Responsiveness Summary for the comments from the public and the applicants on the draft permits.

In August 2005, in accordance with the CAAPP, the Illinois EPA prepared and sent proposed CAAPP permits and a draft Responsiveness Summary to USEPA for a 45-day review. Within the 45-day review, the USEPA expressed no objection to 21 of the 22 CAAPP permits. As such, today the Illinois EPA has issued the 21 CAAPP permits and a Responsiveness Summary.

Petitions

Under the CAAPP, Illinois is required to submit proposed CAAPP permits to USEPA for review. The CAAPP specifies that USEPA may object to a permit; where it does not object, the public may petition USEPA to take such action.

As previously mentioned, in October 2003, the Illinois EPA sent proposed CAAPP permits to USEPA for 22 coal-fired power plants. USEPA did not object to any of these CAAPP permits. In January 2004, the USEPA received petitions requesting that the

USEPA take action objecting to the CAAPP permits for Midwest Generation, LLC's Crawford, Fisk, Joliet, and Romeoville plants. Additionally, in January 2004, the USEPA received a petition requesting USEPA take action objecting to the CAAPP permit for Midwest Generation, LLC's Waukegan plant. The petitions collectively assert that certain or all of the CAAPP permits, in places, fail to comply with state and federal requirements, lack compliance schedules, inappropriately allow excess emissions during malfunction, breakdown and startup, contain terms that are not practically enforceable, fail to address health impacts of the plants, and contain typographical errors, mistakes, and omissions and other inadvertent mistakes. The USEPA did not proceed to respond to any of these five petitions until it was threatened with a lawsuit. Subsequently, pursuant to a settlement to forgo litigation, USEPA responded to the petitions regarding the Crawford, Fisk, Joliet, Romeoville and Waukegan plants, generally denying the petitions but, in part, granting the petitions, often charging the Illinois EPA failed to explain its rationale for certain actions.

The CAAPP permits for the coal-fired power plants that are being issued today address significant public comments. This includes those comments that carried over into the five petitions, and the USEPA's responses to the petitions. Specifically, the permits clarify and enhance the requirements applicable to these plants, including the recordkeeping, reporting, and testing requirements of the permits. Additionally, typographical errors, omissions and other inadvertent mistakes have been addressed.

General Explanation of Coal-Fired Power Plant Permits

Generally speaking, and as more specifically described below, the 21 plants at issue operate coal-fired boilers and associated steam turbines to produce electricity. In addition, these plants have coal-handling operations and, in some cases, other operations including coal processing, fly ash handling operations, diesel engines, combustion turbines, limestone handling or processing operations, and gasoline storage tanks.

A. Coal-Fired Boilers

Each of these 21 plants operate coal-fired boilers for electric generation. The size and age of the boilers varies from older boilers as small as 22 MW to larger, newer boilers in excess of 600 MW. These boilers in some cases have the physical capability to fire gas or oil as auxiliary fuel and routinely use a combination of coal, natural gas, and/or fuel oil as their principal fuel.

CO emissions from the boilers are addressed by good combustion practices. NO_x emissions from the boilers are generally controlled by combustion control measures including low-NO_x burners (LNB) and, over fire air systems (OFA). Certain larger boilers also use add-on selective catalytic reduction systems (SCRs). PM emissions are controlled by electrostatic precipitators (ESPs) except at SIPCO where on one of its boilers a baghouse is utilized and at Soyland where a multi-clone is utilized. Most boilers comply with requirements for SO₂ emissions by selection of coal, however, boilers at four plants have control equipment for SO₂ emissions. This control is flue gas desulfurization

systems (scrubbers). The four plants that have scrubbers are Ameren (Duck Creek), SIPCO (#4), Soyland and CWLP (#33).

The boilers are generally subject to emission standards for CO, NO_x, PM, and SO₂. The boilers are also subject to limitations on the opacity of emissions. With one exception, the boilers are also subject to the federal Acid Rain Program, which imposes requirements on SO₂ and NO_x emissions and requires that the boilers be equipped with continuous monitoring systems (CMS) for SO₂, NO_x, and opacity, with computerized data systems for collection of data. The exception to these requirements is Soyland whose small coal-fired boiler is not subject to the federal Acid Rain Program.

The boilers have the potential to exceed the applicable opacity limitations and emission standards during malfunction and breakdown of equipment. As provided by applicable regulations during malfunction and breakdown, the boilers are authorized to continue operations as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment. Upon occurrence of excess emissions, a source 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.

The boilers are operated pursuant to formal operating procedures. The permits require that the boilers must be started up in accordance with procedures that are developed and maintained to minimize emissions. As more fully addressed later in this Responsiveness Summary, these startup procedures are applicable because emissions from the coal-fired boilers have the potential to exceed the opacity limitation and applicable emission standards during startup.

For PM, for which continuous monitoring is not performed, emissions testing is required for the boilers. Generally, initial PM testing is to be performed within either 180 days, one year or two years of the permit becoming effective, with 180 days required for the two plants in Chicago, two years required for plants in rural areas, and one year required of other plants. The time interval between subsequent, periodic testing is, in part, dictated by the results of the prior test. Testing must be performed using standard reference Methods 5 and 202, as more fully discussed later in this document. CO emissions testing is also required for the boilers and shall be performed in conjunction with PM testing unless a CO test was completed during a prior relative accuracy test audit (RATA). All emissions testing is to be conducted at maximum operating load and other operating conditions that are consistent with normal operation.

Operating records are to be maintained for the boilers control equipment and for continuous monitoring equipment.

The sources must maintain records that include: the date, description, and duration of each startup. In addition, if startup does not progress in a timely manner to operation in compliance with applicable standards (generally, four hours for boilers rated at 200MW or less, six hours for boilers rated at 200MW to 400MW, and eight hours for boilers rated at 400MW or greater) or if the source's startup procedures are not followed, further

records are required. These additional records must include a detailed explanation of why the startup was not completed sooner or why the source's procedures were not followed; the time at which solid fuel (coal) firing was begun; the flue gas temperature at which the ESP was energized, if coal was fired before the ESP was energized; and estimates of the magnitude of emissions in excess of the applicable standards during startup. For the circulating fluidized bed boiler at SIPCO, a record of the SNCR reagent is also required.

Each plant shall maintain records that include a maintenance and repair log and records for each incident when operation of a boiler continued with excess emissions. These records must include the date, duration, and description of the malfunction/breakdown; the corrective actions used to reduce the quantity of emissions and the duration of the incident; information on whether opacity exceeded the applicable standard for two or more hours; whether PM, CO, or NO_x emissions may have exceeded the applicable standard; a detailed explanation of why continued operation of the affected boiler was necessary; the preventative measures that have been or will be taken to prevent similar malfunctions or breakdowns in the future including any repairs to the affected boilers and associated equipment; and an estimate of the magnitude of excess emissions during the incident.

The provisions of the permits for notification and reporting provide a hierarchy of reports. Excess PM emissions, which would be associated with malfunction/breakdown of equipment, are to be reported immediately and followed by a written report within 15 days of the event. Extended opacity exceedances, in which the total duration of exceedances is greater than 30 minutes (more than 5 exceedances) are also to be reported immediately and then followed with a written report within 15 days if they persist for more than 120 minutes (20 exceedances). The plants are also required to submit quarterly reports that address exceedances, along with data from the CMS for SO₂, NO_x, and opacity.

The plants are required to provide information in the quarterly reports addressing all deviations from applicable requirements of the permit, including both emission control requirements and requirements for monitoring and recordkeeping. This is a common requirement for all units at these plants, including the support operations for the boilers. Such reports would also include information on the total operating hours; the greatest load achieved by each boiler; a discussion of significant changes in the fuel supply; the number, nature, and total duration of startups; information for SO₂, NO_x, and PM emissions and opacity; and operational information for continuous monitoring systems. These reports must include the following information for each period when emissions were in excess of an applicable limitation: the starting date, time, and duration of the excess emissions; the measured emissions rate; and a detailed explanation of the cause of the excess emissions with a discussion of the corrective actions taken to lessen the emissions. Similar information would be required in the unlikely event that CO emissions exceeded the applicable standard, as would be determined from operational data for a boiler.

For opacity and PM exceedances, the quarterly reports must also contain summary information. For each type of recurring opacity exceedance, the reports must include information generally addressing the effectiveness of corrective actions and the role of component failure or degradation. In addition, these reports must provide further information for any new type(s) of opacity exceedance, including a general narrative description, a general explanation of the cause(s), a detailed explanation of the corrective actions, the effectiveness of those actions and the likelihood of future occurrence. Other information relevant to generally explaining the number and magnitude of opacity and PM exceedances during the quarter should also be reported.

In the case of a malfunction/breakdown, sources shall immediately notify the Agency where the applicable PM emissions standard could be exceeded or where the opacity from the boiler exceeds or may have exceeded the applicable limit for more than five consecutive 6-minute averaging periods. A follow-up report is to be submitted within 15 days.

B. Other Boilers for Electrical Generation

A few of these plants also operate smaller natural gas or oil-fired boilers for power generation. These boilers are typically operated only when the coal-fired boilers are inadequate or unavailable to meet the demand for electricity. These boilers are not equipped with add-on control equipment, but instead rely on selection of fuel and good combustion practices for control of emissions. The boilers shall be started up in accordance with written procedures that are specifically developed to minimize emissions from startups. The boilers are generally subject to emission standards for CO, PM, SO₂, as well as the opacity limitation.

Similar to the coal-fired boilers, some of the oil/gas-fired boilers are authorized subject to certain terms and conditions to continue operations with excess emissions as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and subject to applicable conditions. In the case of a malfunction/breakdown, sources shall immediately notify the Agency for each incident in which the opacity from the boiler exceeds or may have exceeded the applicable standard for an extended period of time. A follow-up report needs to be submitted within 15 days.

Testing requirements for these boilers are developed on a boiler-specific basis to consider the limited operation of a boiler. These boilers are not subject to the extensive emission monitoring required of the coal-fired boilers, given the nature of the fuels being fired and the limited operation of the units. Other recordkeeping requirements are imposed as appropriate for the nature of the operations and applicable standards. Quarterly reporting is required consistent with the schedule for coal-fired boilers.

C. Auxiliary Boilers

Auxiliary boilers or heating boilers provide steam to support the operation of a plant, including producing steam to heat a “power boiler” as part of the preliminary startup of a

boiler, not for generation of electricity or distribution. These boilers do not operate when the power boilers are operating. Provisions for these boilers are similar to those of the natural gas and oil boilers used for production of electricity.

D. Coal Handling and Coal Processing

These plants handle, transfer, and store coal in a series of operations. Coal processing is also conducted at many of these facilities to reduce the size of the coal to meet the fuel size requirements of the boilers. PM from coal-handling and coal processing is controlled by various measures, including the natural moisture content of the coal and application of dust suppressant and water spray, as well as with enclosures, covers, and dust collection devices. The PM emission from coal handling and processing are subject to an opacity limit and various regulations that address fugitive PM emissions. The PM emissions from coal processing operations are also subject to PM emission standards for process emission units.

For coal handling and processing, at least monthly inspections of control measures are to be performed while the equipment is in use, by personnel that are not directly involved in the operation on a day-to-day basis. These inspections are to confirm compliance with the work practices utilized to control dust (PM emissions). Also, detailed inspections of dust collection equipment are to be performed at least every 15 months while equipment is out of service, both before and after any maintenance and repair is performed. The inspection before any maintenance or repair is performed addresses the condition of the equipment as it was operating historically. The second inspection addresses the condition of the equipment for future operation, addressing the maintenance and repair that has been performed.

For coal handling and processing, opacity testing is generally to be performed on an annual basis with initial testing generally required within three months of the permit condition becoming effective. For coal handling, subsequent testing shall be performed at least annually. Additionally, for coal processing, to address the PM emission standards, PM testing shall be promptly performed upon request of the Agency. Testing on a set frequency is not required because the control measures used for coal processing, when properly operated, assure compliance with these standards and the performance of control measures can be assessed by direct observation. Provision is made for testing upon request in the event that such direct observations are unable to determine compliance.

For both coal handling and processing, records shall be maintained for, among other things, the control measures that are being used, operational data, maintenance and repair activities, and any malfunction/breakdown of equipment. Records of the required inspections shall also be kept.

Reporting of deviations from the established control measures that last more than 12 hours shall occur within 30 days. All deviations from applicable standards or limitations

in the permit must be addressed in a quarterly report, submitted with the quarterly report for the coal-fired boilers.

E. Ash Handling and Limestone Handling and Processing

Many of the plants operate ash removal systems that handle ash collected at the coal-fired boilers in a dry state. PM is controlled by enclosures and dust collection devices. A few of these coal-fired plants handle other bulk materials, typically limestone. PM is controlled by moisture content of the material, enclosures, covers, and dust collection devices. Ash handling and limestone handling and processing are subject to opacity limitations, the fugitive PM emission regulations, and PM standards.

Regular inspections of control measures are required of the operation while the equipment is in use by personnel other than those directly involved on a day-to-day basis to confirm compliance with the work practices. For ash handling and limestone processing and handling, detailed inspections of dust collection equipment must be performed at least every nine months before and after the equipment is out of service.

Initial testing of ash handling and limestone processing and handling units must generally occur within three months of the permit condition becoming effective. Subsequent testing shall be performed at least annually. For Electric Energy and Soyland, such observations are only required for ash handling equipment from which visible emissions, i.e., any visible emission, are normally observed. All units must also undergo PM testing at the request of the Agency.

These facilities shall keep records of, among other things, the specific control measures that are used, operational data, required inspections, and times when the control measures are not utilized.

For ash handling and for limestone processing and handling reporting of an extended deviation from the identified control measures, generally more than two and twelve hours respectively, shall occur within 30 days. All deviations from applicable requirements in the permit shall be addressed in the quarterly report accompanying the report for the coal-fired boilers.

F. Gasoline Storage Tanks

Some of these plants utilize small gasoline storage tanks for fueling of plant vehicles. The tanks are subject to various regulations for control of emissions of volatile organic material (VOM) from storage and transfer of gasoline. All tanks need to be equipped with a permanent submerged loading pipe. Those plants located in the Chicago and MetroEast metropolitan areas cannot use high vapor-pressure gasoline between May 1 and September 15 of each year, consistent with generally applicable requirements in the area for vapor pressure of gasoline. Certain storage tanks, which do not meet the

exemptions for such systems must also comply with applicable requirements for vapor-balance systems.

Annual inspections of these tanks are required. These facilities also must keep appropriate records to show compliance with applicable requirements, such as maintenance and repair logs for the loading and control pipes system. For the plants located in the metropolitan areas, additional records shall be kept to address the additional control requirements that apply in this area.

These facilities shall report significant deviations from the applicable permit requirement, i.e., failure of the submerged loading within 30 days. These facilities must also report in the quarterly report for the coal-fired boilers any other deviations.

G. Engines

Several of these plants operate reciprocating engines fired on oil that power electrical generators. These engines generally function as a source of backup power for a plant to meet various on-site needs. They may also be used as starter engines for combustion turbines at a few plants, which are used to produce electricity for distribution. The engines are fired with distillate fuel oil. These engines are subject to opacity limitations and SO₂ standards.

Initial opacity testing shall be performed within 50 hours of operation, starting from the effective date of a permit and at least every 250 hours of operation thereafter. Opacity shall be observed at least every six months, by someone other than the operator, if the engine is routinely exercised; if the engine is not routinely exercised, such testing shall occur at the request of the Agency or upon every startup.

Initial sampling of the oil supply for engines is required to confirm that the sulfur content of the oil already at a plant is such to allow compliance with applicable standards related to SO₂ emissions. Thereafter, such sampling would normally be required only if a noncompliant shipment of oil was received.

Records shall be kept of the hours of engine operation, opacity observations, maintenance and repair, malfunctions/breakdowns, shipments of distillate fuel oil, whether the SO₂ emission standard would be violated by burning this shipment of fuel, fuel oil usage, and the sulfur content of oil supplied to the engines.

These sources must notify the Agency immediately for each incident in which there are exceedances of the applicable opacity limits. A follow-up report needs to be submitted within 15 days. Sources must also notify the Agency within 30 days of a deviation from the SO₂ standard or when fuel other than distillate oil is burned. All other deviations from any permit condition shall be reported in the quarterly report for the coal-fired boilers.

H. Combustion Turbines

Midwest Generation (Fisk, Crawford), Soyland, SIPCO and Dynegy (Vermilion) operate combustion turbines to supply peaking power and provide an emergency source of power in the event other sources of power fail or are unavailable. The eight combustion turbines previously at the Joliet Station, which were addressed in the draft permit for the station have been retired by Midwest Generation, so are not addressed in the final permit. These turbines are fired with distillate oil and at SIPCO and Midwest Generation (Crawford) the turbines are fired with natural gas and use oil as a backup fuel. The units are subject to the opacity limitation and the SO₂ standard.

Opacity testing shall be performed initially within 250 hours of operation from the effective date of a permit and thereafter at least every 1000 hours of operation. The opacity shall be observed by someone other than the operator at least every six months if the engine is routinely exercised, or every time it is started, as well as at the request of the Agency, if the engine is not routinely exercised.

Records shall be kept of the hours of turbine operation, opacity observations, maintenance and repair, malfunction/ breakdowns, shipments of distillate fuel oil, whether the SO₂ emission standard would be violated when burning distillate oil, the fuel oil usage, and sulfur content of oil supplied to the turbines.

Initial sampling of distillate fuel oil supply for the turbines must occur no later than 30 days after operating a turbine or after a shipment. This is to confirm that the sulfur content of the oil already at a plant is such to allow compliance with applicable standards relevant to SO₂ emissions. Thereafter, such sampling would normally be required if a noncompliant shipment of oil were received.

Immediate reporting of opacity from the engine in excess of the 30 percent limit is required. A follow-up report needs to be submitted within 15 days. Sources must also notify the Agency within 30 days of a deviation from the SO₂ standard or when fuels other than the normal fuels are burned. All other deviations from any permit condition shall be reported in the quarterly report for the coal-fired boilers.

Title I

Title I of the Clean Air Act, among other things, addresses the preconstruction approvals required by the rules for Prevention of Significant Deterioration (PSD) and nonattainment New Source Review (NSR). Although derived of construction permit programs, conditions on new and modified emission units established to address PSD and nonattainment NSR are ultimately embodied in operating permits. Thus, the CAAPP permits may contain previously established, revised or, in limited instance, new conditions pursuant to Title I of the Clean Air Act. Such conditions are designated "Title I" conditions. Where the terms of the condition were established in underlying permits they are designated "TI." Where they were previously established, but are being revised

in the CAAPP they are referred to as “TIR.” Where they are being newly established in the CAAPP permit they are labeled “TIN.”

These T1 conditions place additional limitations and operating requirements on the new and modified emission units at these plants. Typically, the T1 conditions limit annual emissions from a unit. More extensive requirements apply depending on the nature of the project and the regulations that apply. These T1 conditions do not “include” conditions from the historic state operating permits for these plants.

Concern arose for the manner in which the Illinois EPA apprised the public of the existence of T1 conditions in a given permit. It is uncontroverted that the Illinois EPA clearly identifies any T1 conditions within a CAAPP permit. Further, the Illinois EPA provides information as to their origin. The issue is whether and how the Illinois EPA must apprise the public that a CAAPP permit contains T1 conditions. In the public notice that the Illinois EPA provided for each coal-fired CAAPP permit, the Illinois EPA stated “CAAPP permits may contain new and revised conditions established under permit programs for new and modified emission units pursuant to Title I of the federal Clean Air Act, thereby making them combined Title V and Title I permits” In drafts of the permit prior to 2005, the Illinois EPA included a footnote on the front page of each CAAPP permit indicating that the permit may contain T1 conditions and, if so, how these could be identified. Separate explanation was included in each permit indicating where such conditions would be found in the permit. In the July 26, 2005 draft permits and the August 2005 proposed permits, the Illinois EPA modified its approach including a “new” section 1.5 in each permit that in fact contains T1 conditions.

Carryover Provisions

Concern has been expressed for the failure of the Illinois EPA to include all conditions from underlying state permits in the CAAPP permits or to justify or “explain” the absence of certain state operating permit conditions. The CAAPP permits for the coal-fired power plants were thoughtfully and thoroughly crafted to address applicable regulations and requirements. The Illinois EPA has included terms and conditions as appropriate. However, some terms or conditions from prior state operating permits may have been omitted, such as those terms and conditions that were deemed obsolete, and other extraneous, insufficient or inconsistent. These terms were not environmentally significant and served no purpose. This approach is entirely consistent with the “streamlining” discussions set forth in the White Paper I. In fact, the White Paper I specifically authorizes the exclusion of NSR permit conditions that are obsolete, extraneous, environmentally insignificant or otherwise not required as part of the SIP or NSR program. Additionally, many of the conditions that were excluded were in permits that did not satisfy the criteria for federal enforceability, and thus did not constitute federally enforceable state operating permits (FESOP). Further, the commentors have failed to articulate concerns for specific permit conditions. Moreover, the Illinois EPA is unaware of any requirements to justify on a condition-by-condition basis in those conditions that are properly excluded from inclusion in the CAAPP permit(s).

Statement of Basis

The CAAPP requires the Illinois EPA to provide a “statement of basis” setting forth the legal and factual basis for CAAPP permits conditions. Concern has been expressed for Illinois EPA’s adherence to this requirement. The concern appears to relate to the extent and form of the information that has been provided.

The CAAPP program does not prescribe the extent or form for providing a “statement of basis.” Further, the requirement as spelled out in both the Illinois CAAPP and the federal regulation calls for a “statement.” The plain language of the requirement suggests a certain brevity, if not generalization, as to the basis for permit issuance. Moreover, the purpose of the statement is to guide the USEPA or public through the CAAPP permit. It should also be noted that Federal regulation and other guidance likewise do not prescribe detailed requirements for a permit statement of basis.

The Illinois EPA maintains that each CAAPP permit, together with the initial project summary, adequately describe the coal-fired power plant and address operational flexibility, the permit shield, applicable and non-applicable provisions, monitoring and Title I requirements. Moreover, the record for each CAAPP permit, including this Responsiveness Summary, aptly support the terms and conditions of each permit. Collectively, this information should be sufficient to satisfy the statement of basis requirement. Even if the statement of basis for any of the 21 coal-fired permits were procedurally flawed, it cannot be said that the permits do not comply with the requirements of the CAAPP or the Clean Air Act. Construing such minor deficiencies in the permitting process as a basis for finding the permits themselves deficient is specious and elevates form over substance.

Insignificant Activities

Comments were received regarding the requirements to which “insignificant activities” are subject. The CAAPP permit addresses these units in one distinct section. This is contrasted with emission units that are not insignificant; these are addressed in unit-specific sections of the CAAPP permit. Notwithstanding, “insignificant” emission units and “non-insignificant” emission units alike are subject to unit specific type conditions as well as general and standard conditions as more specifically set forth in the CAAPP permit.

Origin of Authority

Concern has been expressed for the manner by which the Illinois EPA has “specified” or “referenced” the origin of and authority for each permit term and condition. As a general matter, the Illinois EPA endeavored to provide the regulatory citation for requirements contained in the permit. Where none existed or as otherwise appropriate, the Illinois EPA made reference to the applicable statutory authority. To the extent a particular permit requirement bears no statutory or regulatory reference, the general statutory authority of

the Illinois EPA under the CAAPP is the basis for the requirement. This authority allows the Illinois EPA to include conditions in CAAPP permits as necessary to accomplish the purposes of the Act and is clearly articulated in condition 9.15.

Compliance Schedule

The Illinois EPA has received comments regarding the need to include a compliance schedule in the 21 coal-fired CAAPP permits pertinent to opacity, as well as New Source Review (NSR). These suggest that the sources are not in compliance with opacity and NSR requirements on an ongoing basis. These comments suggest that the failure to include a compliance schedule results in a permit that is deficient.

The test for the adequacy of a CAAPP permit in this regard is largely whether it contains conditions sufficient to assure compliance with all applicable requirements at the time of issuance.

The CAAPP requires the inclusion in an application for a CAAPP permit a compliance certification and, where the source is not in compliance with an applicable requirement at the time it submits the application to the Illinois EPA, a compliance schedule. The CAAPP also requires the inclusion of a compliance schedule where a CAAPP source is in violation of an applicable requirement at the time of permit issuance. However, the 21 CAAPP sources at issue certified compliance in their applications for CAAPP permit. Moreover, the public comments submitted for each of the plants do not support the inclusion of compliance schedules in the permits. Accordingly, compliance schedules are not included in any of these 21 CAAPP permits.

The Illinois EPA has also received comments regarding the need to conduct a searching assessment of the compliance status of these plants with the provisions pertaining to opacity, and possibly PM and NSR. However, the CAAPP is not intended to drive compliance investigation nor enforcement activity. To this end, these permits have been crafted to assure enforceability and specifically to assure the plants are not shielded from compliance with the opacity limitation, PM standard or NSR or NSR requirements.

A. Opacity and PM

Specific concern has been expressed whether the coal-fired boilers at the plants are fully compliant with the opacity limitations or PM standards and, if they are noncompliant, whether this triggers the requirement for inclusion of compliance schedules in the CAAPP permits. As recognized in these permits, the coal-fired boilers are subject to opacity and PM standards. As also recognized in the permits, the opacity and PM standards are separate requirements and compliance with these requirements must be separately addressed. This said, opacity is a means by which compliance with the PM standard may be evaluated. More specifically, opacity is a practical means for determining whether PM emissions control equipment, which for the coal-fired boilers at these plants are typically ESPs, are being properly maintained and effectively operated to comply with applicable PM standards. At the same time, while elevated or even excess

opacity may indicate that PM emissions could be increasing, elevated or increased opacity does not necessarily translate directly into noncompliance with the PM emissions standard. In other words, while opacity levels may be used to assess compliance and noncompliance with PM standards, opacity levels do not provide a precise gage for distinguishing between compliant and noncompliant operations.

Historical emissions testing of the coal-fired boilers for PM indicates PM emissions from the coal-fired boilers are typically well within the applicable standard. This is consistent with information that indicates that the ESPs at these plants as well as the baghouse at SIPCO and multi-clones at Soyland can generally ensure compliance with the PM standard even when a number of the fields in the ESP or compartments of the baghouse/multi-clones are not in service. In addition, neither the applications nor comments provide information evidencing noncompliance with the PM standard. Accordingly, a factual basis has not been presented upon which to include compliance schedules in these CAAPP permits related to PM emissions from the coal-fired boilers.

Contrary to concerns expressed by the public and claims by certain sources, the CAAPP permits require these plants to comply with the applicable opacity standards, even during malfunction/breakdown and startup. Quarterly opacity reports submitted to the Agency by the sources, though not part of the permit applications indicate that the coal-fired boilers do, at times, exhibit excess opacity. Comments suggest that this is sufficient to trigger the requirements for a compliance schedule. However, as previously noted, each source certified compliance. Additionally, information in the quarterly opacity reports, as have been resubmitted to the Illinois EPA with certain public comments, is not determinative of whether these exceedances constitute violations, much less signify violations. Even to the extent these exceedances rise to the level of a violation, past exceedances do not necessarily constitute a sufficient basis to include a compliance schedule in these permits.

While comments claim that the numbers of exceedances are significant, consideration must be given to the fact that opacity is measured and counted as 6-minute averages. As a result, the number of exceedances and aggregate duration of exceedance are not directly equivalent. For example, 10 exceedances constitute only one hour of potential non-compliance. Further, the statistics for the total numbers of exceedances at a plant do not accurately reflect the extent of exceedances by individual boilers. Moreover, available information indicates the past exceedances have only intermittently occurred and then abated, with no particular pattern of cause or frequency. Certainly for the vast majority of time, the coal-fired boilers comply with opacity limitations. That opacity exceedances may occur intermittently is contemplated by state and federal regulations and by federal guidance. Accordingly, these circumstances do not warrant the imposition of a compliance schedule on the basis of alleged opacity exceedances.

Notwithstanding the above, the Agency tailored the CAAPP permits with a particular emphasis on PM emissions so as to comprehensively assure compliance with applicable requirements, including opacity.

B. New Source Review

Concern has also been expressed for whether the coal-fired plants have triggered NSR, are now non-compliant with the requirements of NSR, require the inclusion of a compliance schedule in their respective CAAPP permits, and should be required to install control technology. Further concern has been expressed for the propriety of the CAAPP permits given the absence of compliance schedules.

As a threshold matter, all sources subject to the CAAPP must obtain a permit to operate that assures compliance by the source with all applicable requirements. As a general matter NSR requirements constitute applicable requirements. However, the application and public comments do not provide information of the type that is necessary as a matter of law, to show that NSR, as a matter of fact, has been triggered by activities at these plants and is an applicable requirement for any of these plants, much less whether NSR control technology requirements are applicable.

Congress established NSR as part of the 1977 Clean Air Act amendments and slightly modified it in the 1990 amendments. NSR is a pre-construction permitting program that generally serves two purposes. First, it ensures that air quality is appropriately protected from the addition of new emission units and modification of existing emission units. In areas with unhealthy air, NSR assures that major projects do not interfere with progress toward cleaner air. In areas with clean air, it assures maintenance of that air quality. Second, NSR requires that any large new or modified emission source will be as clean as possible and that appropriate improvements in pollution control occur concurrent with the “construction” activity.

The potential NSR issues posed at these plants are complex and investigation of these issues is not amenable to resolution during permitting. The issues require in depth case-specific assessment and resolution. The USEPA has assumed the lead in investigating NSR compliance in the coal-fired power plant industry as part of a national electric utility enforcement initiative. USEPA has alleged that a number of utilities have made non-routine repairs or other changes to coal-fired boilers and failed to undergo NSR apparently relying on the belief that the activities fell within exemptions under NSR. These allegations have yielded a great deal of litigation, which largely relates to the questions of whether the USEPA’s interpretation of what constitutes routine maintenance and repair constituted a change in policy perhaps necessitating rulemaking, and whether this interpretation was reasonable. The litigation is not yielding a clear or consistent answer to this question. Meanwhile, the federal NSR investigatory efforts are ongoing. Because the investigation and litigation continue, because the 21 sources certified compliance and included no compliance schedules in their respective applications for CAAPP permit, and because the records for the 21 CAAPP permits lack information clearly showing noncompliance with NSR, it is premature, unnecessary, and inappropriate to attempt to make NSR applicability determinations for these plants and to include compliance schedules in the CAAPP permits.

Secondarily, operating permits are generally not the appropriate means for addressing NSR concerns, much less operating permits issued under the CAAPP. As mentioned elsewhere in this document, CAAPP permitting is not intended to create and impose new emission control requirements. Even if CAAPP permitting were an appropriate place for investigating NSR, once determined applicable, the appropriate venue in which to address substantive requirements of NSR would be construction permitting. This is because determinations of appropriate control technology, as required by NSR, should be made as part of preconstruction approvals subject to the administrative procedures for preconstruction permitting. Accordingly, the concern about NSR expressed in comments is not appropriately addressed through imposition of compliance schedules in these CAAPP permits, and none of these permits contain such schedules.

Notwithstanding the above, at the request of USEPA, a placeholder was included in the CAAPP permit for Dynegy's Baldwin power plant, which was the subject of an enforcement action for NSR. Nonetheless, the Illinois EPA has inserted a placeholder in these CAAPP permits that are unaffected by the Dynegy Consent Decree. This placeholder has been replaced with the emission control requirements from the Consent Decree that has been entered into by Dynegy, USEPA and others to resolve this enforcement action. Significantly, this resolution occurred without a specific determination of the existence of NSR violations, much less the exact nature and scope of any such violations.

Agency Access to Records

Concerning access by the Illinois EPA to operational and emissions records at these plants, the Illinois EPA has the authority, to collect information in order to carry out the purposes of the Environmental Protection Act. The Illinois EPA is authorized also to include provisions in CAAPP permits that exercise its ability to collect relevant information. That certain records shall be copied and submitted to the Illinois EPA on some established reporting schedule, as set forth in the CAAPP permit is unquestioned. Further, any required records at a plant that the Illinois EPA elects to inspect and collect in person are to be furnished to the Illinois EPA. This said, the Illinois EPA's on-site inspection of records and written or verbal requests for copies of records will generally occur at reasonable times and be reasonable in nature and scope.

Reference Method 202 Testing

The Illinois EPA received comments from the sources regarding provisions in the permits addressing opacity and PM emissions. In response, PM emissions testing using Reference Methods 202 (in addition to Reference Method 5) is being required to measure condensable PM emissions that are not addressed with the Method 5 sampling train because they are still in a gaseous state. Reference Method 202 is one of the USEPA's Reference Methods incorporated into the Pollution Control Board's PM regulations at 35 IAC Part 212. Significantly, the use of Reference Method 202 is not limited by geographic area or regulatory applicability. The requirement for testing using both Methods 5 and 202 is authorized by Section 4(b) of the Environmental Protection Act.

Further, the inclusion of the requirement in the CAAPP permit is authorized by Section 39.5(7)(a) of the Act. The inclusion of this requirement in these CAAPP permits, which relates to full and complete quantification of emissions, does not alter the test measurements that are applicable for determining compliance with PM emissions standards and limitations, which generally do not include condensable PM emissions. In addition, since condensable PM emissions are not subject to emission standards, the permits allow use of alternative test methods for such measurements with approval of the Illinois EPA. This is necessary and appropriate to accommodate improvements to Method 202, which USEPA is currently pursuing. This addresses concerns expressed by sources about the technical adequacy of current Method 202. However, such concerns do not support forgoing such measurements entirely.

Inspections

In response to comments pertaining to opacity and PM emissions from material handling operations at the coal-fired power plants, which are potential sources of fugitive PM emissions, the permits require that periodic inspections of coal processing, coal handling, limestone handling and fly ash handling operations be performed by staff that are not involved in the day-to-day operation of these facilities. These inspections supplement and corroborate the observations and actions of the employees who operate these facilities on a daily basis.

The persons who may perform these periodic inspections are not required to possess specific skill sets or certifications. While these individuals must determine whether there are visible emissions from said operations, the observation of whether visible emissions are present is a matter for which training and certification is not required. As set forth in Reference Method 22, determinations of the existence of visible emissions can be made and recorded by a member of the general public. Likewise, the identification of accumulations of fines in the vicinity of a process does not require technical training. It merely requires that an individual be able to identify accumulations of coal dust or other material. This is also an action that could be performed by a member of the general public. Moreover, this is a reasonable requirement for the plants for which it is being applied, which are required to implement operating programs to minimize emissions of fugitive dust. At such plants, accumulations of fines can potentially contribute to emissions of fugitive dust, as they could become airborne in the wind.

While the CAAPP permits could specify that the individuals conducting inspections possess a certain level of experience with the type of facility being inspected or supervise the individuals actually operating a facility, the Illinois EPA does not believe that such qualifications are mandated, given the simplicity of the inspections that are being required. However, an appropriate qualification for the persons who perform these inspections is that they must be “independent” of the daily operation of the facility being inspected. For this purpose, a person “fresh” to the facility and removed from operational issues would arguably be best suited. However, the permit does not further restrict the persons a source may designate to perform these periodic inspections, beyond the requirement that they be removed from the day-to-day operation of the facilities that are

being inspected. CAAPP permits must include measures to assure compliance. Requiring that a person, other than the one responsible for daily operations, perform periodic inspections is fully consistent with this obligation.

Additionally, inspections are being required for gasoline storage tanks. Specifically, annual inspections are required to ensure compliance with applicable loading and control pipe requirements.

Fugitive Operating Program

Concern was expressed that conditions of the permits for certain plants, which requires these sources to operate “under the provisions of an operating program ... designed to significantly reduce fugitive particulate matter emissions,” contains vague language. Also, concern was expressed for a related provision that requires these sources to amend the program “from time to time” so that it is “current.” Additionally, concern was expressed for the related requirement that paved areas be cleaned on a “regular” basis. Lastly, concern was expressed for the Agency discretion relative to the review of fugitive PM operating programs.

The particular regulations that require these operating programs, as applicable to power plants, were part of Illinois’ State Implementation Plan for compliance with the National Ambient Air Quality Standards (NAAQS) for Total Suspended Particulate (TSP). The State of Illinois successfully complied with this NAAQS, which was subsequently replaced by the PM₁₀ NAAQS, and has now been supplemented by the PM_{2.5} NAAQS. Moreover, the relevant language found in the CAAPP permits is taken directly from the applicable State regulations. These regulations constitute applicable requirements. Thus, the regulatory language was necessarily and appropriately included in the CAAPP permits in the manner that it was.

The USEPA acknowledged the propriety of this language in its responses to petitions. Any attempt to further develop the language would risk contradiction with the underlying regulation, as the regulation provides flexibility to appropriately address the varying potential for emissions of fugitive dust at different sources, while providing sources flexibility in the methods used to control such emissions. Moreover, the expressed concerns are ill-founded as various elements of State regulations are included in the CAAPP permits and the public may independently pursue enforcement action for, among other things, the lack of a fugitive program, an inadequate fugitive program, the failure to adhere to a fugitive program, or fugitive emissions that are visible overhead beyond a source’s property line.

Mercury

Concern has been expressed that the CAAPP permits for these plants do not contain conditions for limiting, monitoring, measuring and reporting mercury emissions. The permits contain all “applicable requirements” related to mercury emissions. Also, control requirements for mercury emissions can be most effectively, adopted on an industry-wide

basis by law and rule, rather than source-specific action during CAAPP permitting. Further, as explained elsewhere in this document, CAAPP permits are not a means to enact new substantive emission control requirements. Notwithstanding, the Illinois EPA is requiring the plants to take reasonable actions to quantify their mercury emission and report their emissions on an annual basis. The Illinois EPA is authorized to obtain this information under Section 4(b) of the Environmental Protection Act. Further, the Illinois EPA, as also authorized, is including this as a reporting requirement in the CAAPP permits pursuant to Section 39.5(7)(a), (b), (e) and (f) of the Environmental Protection Act.

Alternative Fuels

Concern has been expressed for certain aspects of the operational flexibility afforded the plants, both generally and for certain plants and emission units. The provisions at issue have not circumvented nor failed to address or include applicable state or federal requirements, including but not limited to state requirements of local siting approval. Additionally, the concern that these coal-fired boilers would trigger local siting requirements when burning fuels other than coal, such as used oil or tires is generally misplaced.

The State of Illinois has a local siting approval process under State law for certain types of facilities. This siting requirement is in addition to local zoning and land use laws. Local siting approval is, in certain instances, a prerequisite for new development of pollution control facilities, as it must precede issuance of construction and development permits for such facilities.

Under scenarios authorized by any of these CAAPP permits and the provisions that are at issue, none of the coal-fired power plants would constitute a “new pollution control facility.” Even assuming arguendo that a plant would propose a change in its operation that would constitute a “new pollution control facility,” each CAAPP permit clearly articulates that the requisite permitting for a new pollution control facility must be obtained as appropriate. Regardless, siting is not part of the Illinois SIP, and could never constitute an “applicable requirement” under the Clean Air Act. Accordingly, as the USEPA concluded in its responses to petitions, local siting approval does not need to be further addressed in the CAAPP permits.

Concern was also expressed for the Illinois EPA’s failure to address Section 39(i) of the Environmental Protection Act prior to issuing CAAPP permits for these plants. Section 39(i) states in pertinent part that before issuing any RCRA permit, the Illinois EPA shall conduct an evaluation of the sources prior experience in waste management operations. 39(i) is not applicable in the context of the permitting determinations for these plants. The permits at issue are CAAPP permits not RCRA permits. Further, these sources are not asking for permits to become “new pollution control facilities or more specifically waste-storage or disposal sites, waste transfer or transporting operations, or waste incineration facilities.” In fact, the Illinois EPA has placed limitations in the permits expressly precluding the sources from becoming these types of operations. As such, the

requirements of Section 39(i) are not applicable and have appropriately not been addressed by the Illinois EPA.

These sources simply seek to maintain their existing ability to supplement coal with other fuel materials. This was possible under the previous operating permits for these plants and it is not appropriate for these CAAPP permits to eliminate this ability. This is particularly true as the coal-fired boilers at these plants are equipped with continuous monitors and the permits include provisions to assure compliance with applicable emission control requirements even when the coal supply is being supplemented with alternative fuels.

Malfunction/Breakdown and Startup

A. Continued Operations

The Illinois EPA has received comments regarding conditions within these CAAPP permits pertaining to operation with excess emissions during malfunction/breakdown and startups. More specifically, the comments suggest that the permits provide for “automatic exemptions” and that these exemptions are contrary to federal guidance on the topic. The comments seek clarification that excess emissions during malfunction/breakdown and startup constitute violations, that the permit conditions at best provide for an affirmative defense and that this defense would run only to actions for civil penalty, not technical or injunctive relief.

The coal-fired boilers at the coal-fired power plants and certain “secondary” emission units at particular power plants have obtained malfunction/ breakdown or startup authorization. For any plant that has received such authorization, the type of authorization (i.e., malfunction/breakdown or startup) it received, the units for which authorization has been received, and the conditions under, and manner in, which such authorization may be utilized are clearly set forth in the CAAPP permit. The origin of these authorizations is 35 IAC 201.149.

35 IAC 201.149 prohibits continued operation of an emission unit during malfunction or breakdown of the unit or associated air pollution control equipment, or startup of an emission unit or associated air pollution control equipment, if such operation would cause a violation of applicable emission standards or limitations absent express permit authorization (emphasis added). The further provisions pertaining to such permit authorization are set forth in 35 IAC Part 201, Subpart I. These provisions make clear that this process in Illinois for addressing malfunction/breakdown and startup is a two-step or multi-phase. The first step, as set forth at 35 IAC 201.261, consists of seeking authorization through a permit application to prospectively make a claim of malfunction/breakdown or startup. Pursuant to the provisions for malfunction/breakdown, the application shall include an explanation of why continued operation is necessary; the anticipated nature, quantity and duration of emissions; and measures that will be taken to minimize the quantity and duration of emissions. Pursuant to the applicable regulations, for startup, the application shall include a description of the

startup procedure, duration and frequencies of startups, type and quantity of emissions during startups, and efforts to minimize emissions, duration and frequency. These regulatory requirements are acknowledged by the CAAPP, pursuant to Section 39.5(5)(s) of the Environmental Protection Act. Absent a request for authorization in an application for a CAAPP permit and a grant of such authorization placed in a CAAPP permit issued by the permitting authority, a CAAPP source or other source of emissions in Illinois cannot legally make a claim of malfunction/breakdown or startup under Illinois regulations.

The approach taken by Illinois' regulation can be distinguished from and contrasted with that of the federal New Source Performance Standards (NSPS) regulations, under 40 CFR Part 60. These federal regulations address excess emissions during malfunction (and shutdown) or startup without the initial step present in Illinois' rules. This is because all sources are able to claim exclusion from otherwise applicable standards during a malfunction or startup event. The validity of the claims is then subject to scrutiny by USEPA and the state enforcement authority, as to whether they accept the source's claim that an incident should qualify for exemption. That is, that the excess emissions could not be readily prevented and were not contrary to good air pollution control practice on the part of the source. This case by case scrutiny can also occur under the approach in Illinois regulations, as the second step provided for in Illinois' regulations as described later. This "federal approach" is also present in these CAAPP permits, as certain emission units are subject to the NSPS. Emissions in excess of an NSPS limit that occur during malfunction or startup are governed by the NSPS approach to such incidents. The Illinois approach only applies to emission standards found in state air pollution control regulations at 35 IAC Subtitle B.

For those units for which sources sought malfunction/breakdown or startup authorization, the applications for CAAPP permits from these sources contained Forms 204-CAAPP and 203-CAAPP, respectively entitled Request To Continue To Operate During Malfunction And Breakdown and Request To Operate During Startup of Equipment. These forms seek the specific information required by the relevant state regulation. Accordingly, the sources sought malfunction/breakdown authorization as well as startup authorization in accordance with applicable Illinois' regulation. In turn, based on its review of the applications, the Illinois EPA granted authorization to the sources to make a claim of malfunction/breakdown or startup. That the CAAPP permits afford such authorization, does not equate to an "automatic exemption." The grant of such initial authorization is also fully consistent with long standing practice in Illinois permitting and enforcement with coal-fired power plants. On one hand, this practice recognizes that power plants provide an essential service, as they supply electricity that is essential to the public's well-being. In addition, these plants, due to their size and complexity may experience excess emissions due to events that cannot be readily anticipated or reasonably avoided. On the other hand, the operators of these coal-fired power plants are also fully aware that they may be held to account for any excess emissions that do occur.

The second phase of Illinois' process for operation with excess emissions during malfunction/breakdown or startup, as set forth at 35 IAC 201.262, addresses the showing

that must be made for a malfunction/breakdown or startup incident in order to make a viable claim of malfunction/breakdown or startup. Pursuant to the regulations, for malfunction/breakdown, this showing consists of a demonstration that operation was necessary to prevent injury to persons or severe damage to equipment, or was required to provide essential services. There are two elements to the required showing, “need” and “function” to make a viable claim. For startup, it shall consist of a demonstration that all reasonable efforts have been made to minimize emissions from the startup event, to minimize the duration of the event, and to minimize the frequency of such events. This showing can be evaluated to a limited degree based on past practice. However, this showing is also prospective, like the showing for malfunction/breakdown, as it relates to future events, which and whose exact circumstances are not known, and which, in fact, may or may not occur.

Notwithstanding these circumstances, the provisions in the CAAPP permits delineating the elements for a viable claim of malfunction/breakdown or startup, do not translate to an “automatic exemption.” They are better considered as laying the groundwork to avoid “misunderstandings” between a source and the Illinois EPA and others that enforce regulations, as to the actions that must occur during malfunction/breakdown and startup. This is particularly true for coal-fired power plants, which routinely operate for long periods of time without excess emissions due to malfunctions/breakdowns, readily correct most incidents in which excess emissions do occur and generally do not experience excess emissions during most startups.

Given the bi-furcated nature of the approach of Illinois’ regulations, the notion that these permits will provide for automatic exemptions is incorrect. The regulations and each CAAPP permit simply afford a source an opportunity, to which the source is entitled, to make a claim of malfunction/ breakdown or startup, with the viability of such claims subject to incident specific review by the USEPA and the state enforcement authority against the requisite showing. Notwithstanding any superficial impressions to the contrary, this is clearly embodied in the relevant rule. 35 IAC 201.265 clearly states that the granting of authorization to operate with excess emissions during a malfunction/breakdown or startup, violating an applicable state standard even if consistent with the terms and conditions of such authorization shall only constitute a prima facie defense to an enforcement action for a violation of regulations. The CAAPP permits within which malfunction/breakdown or startup authorization have been included do not provide shields from the state emission standards that may be violated during malfunction/breakdown or startup events. Rather, as applicable, and as set forth in the CAAPP permits, the plants are subject to the appropriate limitations or standards notwithstanding any malfunction/breakdown or startup authorization included within the permits. Thus, any excess emissions during these events would constitute violations potentially subject to enforcement and appropriate injunctive relief. Nothing in the applicable rules or permit conditions suggest otherwise.

The language in the permits, in places, may have been unclear on these issues. Accordingly, the Illinois EPA has revisited and reworked the language in the CAAPP permits where appropriate. The CAAPP permits now make clear what the sources have

generally “demonstrated” to this juncture, and what they generally will need to demonstrate relative to future malfunction/breakdown and startup events. The Illinois EPA has also simplified the provisions removing details that might suggest that these authorizations provide greater advance authorization for excess emissions than is possible under Illinois’ regulations. In particular, provisions with respect to the duration of malfunction/breakdown and startup events are removed because the duration of such events for which a source might appropriately make a claim cannot be definitively determined in advance. Provisions dealing with tracking the duration of malfunction/breakdown incidents has also been simplified, as triggered by comments from sources. In particular, sources objected to language that addressed the timing of malfunction/breakdown incidents in which emission exceedances were separated by periods of compliant operation. The language in question has been removed, since it is not needed if the duration of the incidents addressed by the authorization is not specified. Provisions for malfunction/breakdown for coal handling, coal processing and other process units that support the operation of the coal-fired boilers are linked to incidents that relate to the operation of the coal-fired boilers. Finally, the Illinois EPA has enhanced the provisions of the permits for recordkeeping and reporting associated with such events. These provisions have also been referenced in the malfunction/breakdown and startup authorization. These actions will facilitate closer scrutiny of these events, to assure that the sources take appropriate action to minimize excess emissions during these periods and respond appropriately when excess emissions do occur.

B. Malfunction Definition

The lack of a definition of malfunction/breakdown in these CAAPP permits was raised as a concern in public comment. Any such definition would potentially be inconsistent with the approach to malfunction/breakdown laid out in applicable regulations. This is because it could suggest that certain malfunction/breakdown events, by definition, qualify for special consideration so as to not constitute violations. Such a definition would only be necessary if the “preliminary authorization” for malfunction/breakdown claims in a permit also acted to shield a source from potential enforcement for such events, which is not the case. As indicated by USEPA in its responses to petitions, the lack of definition is of no affect on the CAAPP permits. As also noted by the USEPA, the term is common, and its plain meaning is clear. The Illinois EPA’s practices indicate that Illinois EPA’s implementation of the term malfunction/breakdown is consistent with federal regulations and guidance. The public comments on these permits do not indicate otherwise.

C. Malfunction Operating Log

As previously indicated, CAAPP permits are to include all “applicable requirements.” In public comment, concern was expressed for the failure to include a requirement for a signed, contemporaneous operating log for the actions undertaken by a source during malfunction/breakdown or startup. The CAAPP permits contain the “applicable requirements” including Illinois’ air pollution control regulations. That Illinois’

regulations do or do not meet the letter of a historic USEPA guidance document is a matter that has no relevance for these CAAPP permits. Moreover, in this instance, the concern is non-substantive, and all substantive elements are satisfied.

Malfunction/breakdown and startup events are subject to recordkeeping and reporting requirements. The required reports, and any other reports that the Agency may seek from a CAAPP source, are subject to certification requirements. Thus, while the records kept on site may not be certified, the information in those records when converted to written reports will be certified.

D. Requirement to Minimize Excess Emissions

In public comments and in petitions to USEPA, concern was expressed for the inclusion of the requirement to minimize emissions from startups by means including “other written instructions.” Additionally, concern was expressed for the use of the terms “timely” and “as soon as” in the requirement for “timely energization of the ESP as soon as can be safely accomplished.” Various changes were made to these CAAPP permits to improve clarity. At the same time, the language of concern was simply intended to address the manner in which plants must comply with the applicable regulatory requirement to minimize emissions during startup. In fact, the CAAPP obligates the Illinois EPA to include applicable requirements and other conditions that serve to assure compliance with the applicable requirements. Regarding the first concern, the permits simply reiterate the sources obligation to minimize emissions. It is commonly accepted that a basic technique for carrying out this obligation is through evaluations and planning that are memorialized in writing, as standardized procedures for startups. However, the development and utilization of such procedures does not relieve a source from the responsibility to review and update those procedures, particularly as circumstances change or procedures are found to be inadequate. Regarding the second concern, the permits list mandatory elements that sources must include in the “other written instructions” to minimize emissions. The language is simply meant to provide detail for the requirement at issue. Further, the Illinois EPA simply intends that a specific measure be undertaken at the earliest juncture that is technically feasible.

Concern was also expressed for the requirement that certain emission units other than coal-fired boilers are to minimize emissions in accordance with “established startup procedures.” In response to this comment, the Illinois EPA has excluded this term from the issued CAAPP permits. It has been replaced with a requirement that sources conduct startup in accordance with procedures that are developed and maintained to minimize emissions during startup, as already discussed.

Concern was also expressed for the phrases “reasonably be repaired” and “reasonable steps to minimize emissions.” The language of concern has not been included in the revised version of permits.

In summary, as previously addressed, there exists a regulatory obligation to minimize emissions during startup. In turn, there exists a statutory obligation to include this requirement in the CAAPP permit as a means to assure compliance. Any concern for the

language by which the Agency attempted to address the means to minimize emission is misplaced, as the base requirement is clear.

E. Malfunction Notification

Concern was expressed for the requirement to “notify the Illinois EPA’s regional office by telephone... as soon as possible during normal work hours for each incident of continued operation during malfunctions and breakdowns.” The time frame for reporting of malfunction/breakdown with excess emissions in the applicable regulations regarding reporting excess emissions during a malfunction or breakdown is “...immediately,” except if otherwise provided in the operating permit (emphasis added). Accordingly, the use of the terminology “as soon as possible” is not prohibited. Nevertheless, the Illinois EPA has altered the language in the permit. This is consistent with the USEPA’s responses to the petitions. That is, the phrase “as soon as possible...” has been replaced with “immediately.” The term “immediately” still embodies the concept of importance to the Illinois EPA, which is to require reporting but not to the detriment of actions to respond to a malfunction/breakdown incident. The Illinois EPA has also refined other incidental aspects of notification and reporting related to malfunction/breakdown incidents, based on specific consideration of the circumstances of the various emission units addressed by these permits.

F. Directives of the Illinois EPA

Concern was expressed for the requirements to comply with all directives of the Illinois EPA characterized as “reasonable.” The inclusion of the term “reasonable” is necessary and appropriate, as the USEPA recognized in its responses to the petitions, as it is taken verbatim from Illinois’ regulations at 35 IAC 201.263.

G. Extensions of Malfunction Authorization

Concern was expressed for the use of both the terms “extraordinary” and “unusual” when characterizing the circumstances under which malfunction/breakdown authorization may be extended. As previously explained, the Illinois EPA has not included this language in the issued permits. This is because the presence of these terms could be interpreted or construed as providing advance or concurrent authorization for the “acceptable” duration of certain malfunction/breakdown events.

Practical Enforceability of Conditions

A permit is enforceable as a practical matter where permit conditions establish a clear obligation on the source and where associated provisions for work practices, testing, monitoring, and recordkeeping reasonably provide for verification of compliance with such requirement(s). The following concerns were raised regarding the practical enforceability of certain conditions of the CAAPP permits.

A. Conditions that Reference Undefined Procedures and Documents.

1. Concern was expressed for the requirement to perform testing under “other operating conditions that are representative of normal conditions.” More specifically, the concern was that the terms are “vague and “undefined ” and allow too much “discretion.” Similarly, during the comment period and in petitions to the USEPA, concern was expressed for Condition 8.5, a General Permit Condition, as it requires testing be conducted using “standard test methods” but fails to define these methods. Additionally, concern was expressed for the requirement that certain emissions measurements be taken at the “appropriate” location in the stack of particular emission units. As a technical matter, such sampling locations are addressed by and would be established based on USEPA Reference Method 1 and the CAAPP permits expressly mandate use of USEPA’s Reference Methods for emission testing. The conditions under which a unit may operate are unit specific and may vary such that the precise conditions under which testing shall occur are best established in the time period shortly before a test event. Standard test methods and procedures are set forth in federal regulations and referenced in the State’s air pollution control regulations. The applicable test methods vary depending on the pollutant at issue and may vary depending on the unit, layout and operating conditions at issue. Furthermore, these sources are required to submit test plans, which are reviewed by the Illinois EPA to help ensure that testing is properly conducted. More specificity regarding test conditions or test methods or procedures in the CAAPP permits is needless and inappropriate, particularly as it would impede timely emission testing conducted under appropriate operating conditions. The USEPA has appropriately denied these concerns raised by petition.

2. During public comment and in petitions to the USEPA, concern was expressed for the inclusion of language in the CAAPP permits that is “practically unenforceable” as either “vague, subjective, or undefined.” Of particular concern were the phrases or terms “from time to time,” “current,” “regular,” and “immediately.” This language at issue is, in many instances, the precise language contained in applicable Illinois regulations. Further, greater precision can be needlessly limiting in certain instances. For example, from a regulatory perspective, where the written notice of an event is desired at the earliest juncture after an incident, it is preferable to use the term “immediately” rather than some set time frame which could be greater than necessary and actually serve to delay notice of the event. Moreover, at times, greater precision may require speculation about facts or scenarios that are not known or cannot be known or that have not occurred or may not occur.

Accordingly, the Illinois EPA does not consider the terms identified in these comments to be inappropriate as a categorical matter. In light of comments, the Illinois EPA reviewed the particular context in which these terms, and other similar terms, were used, to confirm they were appropriately used. The Illinois EPA did alter the CAAPP permits when a more fitting term was identified or a term could be avoided altogether.

3. Concern was expressed for the language at Condition 7.2.9(a) and (b) “which shall be kept up to date” when describing recordkeeping. The language is sufficiently clear on its face, as the terminology is applied to plans, procedures or lists that may

become outdated as circumstances at the plants change. The recordkeeping obligation is ongoing. The USEPA denied this allegation in its responses to petitions.

B. Permit Conditions That Use “Reasonable” or “Reasonably”

During public comment and in petitions to the USEPA, concern was expressed for the use of the term “reasonable” or “reasonably.” The Illinois EPA does not consider such terms categorically inappropriate. Rather, the Illinois EPA reviewed the context within which the terms were used to determine their propriety, deleting or substituting the terms where appropriate. For example, concern was expressed for the requirement that a source implement “measures that minimize visible emissions of particulate matter and provide a reasonable assurance of compliance.” Upon reconsideration, the Illinois EPA agrees that the inclusion of the term “reasonable,” as it modifies the assurance of compliance that is required for measures that must be undertaken, was unnecessary, and inappropriate in this particular context. The term “reasonable” has not been included in the issued permits.

C. Conditions That Allow Agency Discretion

1. Concern was expressed for the fact that the permit allowed the Illinois EPA to “waive” the requirements for testing PM emissions. However, separate from the provision at issue, the CAAPP permits require appropriate periodic testing for PM emissions from the coal-fired boilers. The particular provision of concern dealt with the performance of “extra” tests if a coal-fired boiler operated at significantly greater load than the load during the prior PM tests. Where emissions are well within the applicable emissions limit and a boiler operates at only a slightly higher load, such extra testing may not be worthwhile, but this determination would best be made on a case-by-case basis. At the same time, boiler load during PM emission testing is important and it is best addressed explicitly, rather than in other general provisions of the permit that provide for additional PM testing to be performed upon request from the Illinois EPA.

Waiver language is no longer included in the provision for these extra PM tests. At the same time, to compensate for this action, the criteria for such testing has been adjusted, increasing the time period associated with “high load” operations (generally 2 percent higher than the load during prior testing) from 24 to 30 hours in a calendar quarter. This accounts for the “extra” tests that might arguably have been waived for these plants.

2. Concern was expressed for the condition that provides for Illinois EPA review and approval of a protocol for PM emissions testing of the coal-fired boiler. The requirement for review and approval of such protocol is consistent with the historical practices of both the state regulatory agencies and the USEPA. The purpose of the protocol, and of its receipt and review prior to testing, is to ensure that emissions testing occurs under appropriate conditions, utilizing appropriate test methods and procedures, and ensuring the necessary operational information is recorded during testing. The complexity of testing, the possibility of changing circumstances at the source, and the range of experience of testing services necessitate this exchange prior to testing. The

requirement is wholly consistent with Illinois law and is not an inappropriate exercise of discretion.

3. Concern was raised for whether the language in Condition 7.2.6(a) “which states that a determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or the USEPA...” is practically enforceable. Where this language is used in these permits, it repeats essentially verbatim, regulatory language that is applicable to particular units that are subject to the NSPS, pursuant to 40 CFR 60.11(d).

D. Conditions That Contain “Vague” Language

1. Condition 5.2.7 of the permits addresses the episode action plan. Concern was expressed relative to the definition and content of the plan as well as its terms and time frame implementation. The episode action plan is a requirement of limited application. Nonetheless, such plans are required of these sources by 35 IAC Part 244, and as such, constitute an “applicable requirement.” Accordingly, it is appropriate to include the relevant provisions of the applicable regulations in the CAAPP permits. However, simply because these sources are required to prepare and operate in accordance with a specific plan or procedure does not make the contents of such plans or procedures subject to review as part of CAAPP permitting. In addition, while power plants are required to possess episode action plans, the plans would only be implemented upon the highly improbable issuance of air pollution advisories under the regulations for air pollution episodes. To “define” the plan beyond the language of the relevant State regulations would require speculation about facts or scenarios that are not known, cannot be known, have not occurred, and given Illinois’ history, are unlikely to occur.

2. In public comment, concern was expressed for the use of the term “deviation” in the context of what a CAAPP source is obligated to report. Condition 5.7.1 sets forth a general, source-wide reporting requirement. The term “deviation” is commonly used. Its meaning is clear, a CAAPP source is to report “variance” from the requirements of its permit. Neither the CAAPP nor 40 CFR Part 70 contain a specific definition of the term. Further, definition or refinement of the term would not facilitate implementation of the requirements of the CAAPP for reporting of deviations. In part, this is because a “deviation” does not, in every instance, equate to a violation. In this regard, deviation reporting is more encompassing than violation reporting. There is no evidence in the public comments for these permits that the term “deviation” is used in a fashion that is contrary to the CAAPP. Appropriately, USEPA denied this comment on Petition.

By way of further example, sources claim in their comments that the CAAPP permits unduly expanded the meaning of the term “deviation.” They pointed to certain instances, where they would be required to provide notification when emissions may have exceeded an applicable limit, as well as when the limit has been exceeded. Such requirements are imposed in circumstances where available information for an emission unit may not authoritatively show compliance, such that the exact compliance status is unknown. This

could occur under atypical operating conditions, most commonly malfunction/breakdown. The ability to make an authoritative compliance determination could be prevented by the lack of a qualified opacity observer pursuant to Reference Method 9. Even if such an observer were available, formal opacity observations might not be possible given the time of day or weather conditions. Other available operating information for a unit may also not be sufficient for an authoritative finding of compliance or noncompliance. One is simply presented with an incident where compliance status of a unit is uncertain or suspect. In the provisions at issue, such incidents are appropriately treated as deviations. That is, the source is unable to confirm compliance under operating conditions under which emissions may have exceeded an applicable standard. As such, the incident should qualify as a deviation and be reported. This will allow further investigation to occur by the Illinois EPA, as needed. At the same time, this sort of a deviation cannot be equated with a violation, at least pending further investigation.

3. Concern was expressed for a unit specific condition that describes the monitoring requirements for each coal-fired boiler and attempts to delineate the precise monitoring requirements that are applicable to the sources. To guard against the potential ramifications of inconsistency between the permit language and the language of federal regulations for monitoring under the Acid Rain Program, the Illinois EPA inserted the provision that Part 75 requirements shall prevail in the event of conflicts. No information has been introduced into the record indicating how this condition is contrary to the legal requirements. In fact, the language of concern is not “vague” but rather explanatory. It is also supported by Section 39.5(17) of the Environmental Protection Act, which provides that the Illinois EPA “should not include or implement any measure which would interfere with or modify the requirements of Title IV of the Clean Air Act or regulation promulgated there under.” Appropriately, USEPA denied this concern in responses to petitions.

4. Concern existed for the form of the condition dealing with the submittal of information related to operation of NO_x emissions monitoring. However, the approach in this provision mirrors the approach in the federal NSPS. In addition, the language that the commenters suggest constitutes examples, in fact constitutes reporting requirements. Specifically, reporting of detailed operational information is triggered upon request of the Illinois EPA or where the continuous monitoring system down time exceeds five percent of the total operating time for a boiler.

5. Sections 7.2, 7.3, and 7.4 of the permits commonly address coal handling, coal processing and fly ash handling, respectively. Due to the nature of units at certain plants, these operations may be found in other sections in certain permits or may be nonexistent, when not present at a particular plant. Among other things, each section requires work practices or control measures, to minimize visible emissions of PM from the respective operations and to assure compliance with the applicable emission standards.

Concern has been expressed for the use of the language “such as” in describing the control measures to be utilized. More specifically, the concern is that the listed control

measures are examples not requirements and that control measures may not actually be required at each of the plants for their coal-handling units. The unit-specific conditions as a whole clearly articulate the units and the control measures, the applicable emission limitations and standards, and the inspection, recordkeeping and reporting requirements to ensure compliance with applicable emissions limitations and standards. In fact, the sources possess control measures and are subject to the requirement to utilize such measures to minimize visible emissions. “Such as” was utilized so that it was clear that the control measures necessary to minimize visible emissions are not limited to those that are listed in the permit. Together, the conditions are clear and practically enforceable, as echoed by USEPA in its responses to petitions.

A related concern was expressed that the permits fail to require specific control measures beyond what is currently being implemented, which “could be none at all.” First, as previously stated, the permit identifies the measures that the sources currently possess. Not one CAAPP source is lacking control measures for these operations. Second, any control equipment beyond that which a source currently possesses would require a construction permit. Further, at this juncture, the Illinois EPA has no basis to require additional measures or equipment as there exists no evidence that existing measures are insufficient to meet applicable regulatory requirements. Finally, a detailed recitation of specific control measures is not required in a CAAPP permit, as a CAAPP permit delineates applicable requirements and includes provisions for periodic monitoring (work practices, testing, instrumental monitoring, and recordkeeping) that are adequate to verify compliance with applicable requirements.

6. Concerns were expressed for conditions, which dealt with the final required element in the records that sources must keep for the required periodic inspections of material handling/processing operations. Due to concerns for the intent of these conditions, as expressed by the public and sources, the Illinois EPA has included revised language in the permits. Where the language once read, in pertinent part, “summary of compliance compared to established control measures,” it now reads “a summary of the observed implementation or status of actual control measures as compared to the established control measures.” The purpose of the condition is to have the individual conducting an inspection of the particular material handling or the process operations to summarize his or her detailed findings with respect to what is actually being done for control of dust from particular operations, as compared to what should be being done for control of dust.

7. Certain conditions utilize the term “good air pollution control practice.” This term is a common regulatory term. For an example, refer to 40 CFR 60.11(d). Generally, it means those measures, practices or procedures to diagnose and prevent malfunctions and to ensure the emission unit operates as designed, and is maintained and operated in practice so as to assure compliance. Appropriately, the USEPA denied this concern on petition.

8. Concern was expressed for the adequacy of the standard permit language at Condition 9.8 pertaining to the CAAPP annual compliance certification. First, for the

annual compliance certification as properly noted in the USEPA's responses to petitions, the language is sufficiently clear that the filing deadline is May 1 of the year following the calendar year for which the report is being prepared. Second, as expressed by the USEPA, Condition 9.8 is wholly consistent with the statutory language. Moreover, it is quite clear that CAAPP annual compliance certifications are to include a source's compliance status condition-by-condition, stating for each condition whether compliance was continuous or intermittent and indicating the method(s) used for this determination.

Periodic Monitoring

Concern was expressed that the provisions for certain emission units at these plants, other than the coal-fired boilers, fail to require emissions monitoring or emissions testing and thus, fail to satisfy requirements for periodic monitoring. CAAPP permits include emissions testing, emissions monitoring, recordkeeping and reporting requirements to assure emission units comply with applicable emission control requirements. Significantly, these requirements need not be identical for each emission unit. Rather, various combinations of the requirements will suffice depending on the nature of a unit and the emission control requirements to which it is subject. What constitutes sufficient monitoring is left to the judgment of the permitting authority. The test for the adequacy of these "periodic monitoring" provision(s) is whether they assure compliance with relevant permit conditions.

As a more general matter, the Illinois EPA has reviewed the provisions of these permits to ensure that they include adequate periodic monitoring. This review has resulted in the inclusion of additional work practices, testing requirements and recordkeeping requirements in the permits for certain emission units. For example, to address the CO emission standard for boilers, the permits now require periodic combustion tune-ups as part of the routine operation of the boilers. These tune-ups, which the Illinois EPA believes are already occurring at most, if not all plants, will serve to maintain CO emissions well below the standard. These work practice requirements are accompanied by changes to testing requirements including new requirements for emission testing upon request by the Illinois EPA for boilers for which requirements were not previously made explicit. As a further example, to address compliance with the visible emissions requirements, the Illinois EPA is requiring annual opacity testing for coal handling and processing, ash handling, and limestone handling and processing. Additionally, Illinois EPA is requiring work practices, inspections and record keeping. Collectively, these requirements constitute sufficient periodic monitoring. Specifically, the work practices are to occur continually; the inspections will occur frequently. The required record keeping is frequent and extensive. These requirements, in conjunction with annual opacity testing, adequately assure compliance.

Similarly, concern was expressed for provisions that address the support engines at certain sources, which are subject to the opacity and SO₂ emission standards. The specific concern was that the provisions failed to include "periodic monitoring" provisions sufficient to verify the Permittee's compliance with these standards. Specific provisions for Reference Method 9 testing are now included to address the timing of

measurements to verify compliance with the opacity limitation. In addition, the provisions for sampling of the sulfur content of the distillate oil required to demonstrate compliance with the SO₂ standard have been further developed. This testing coupled with appropriate recordkeeping is both adequate and sufficient periodic monitoring to address compliance with the opacity limitation and SO₂ emission standard for the units at issue.

Several sources have commented that the periodic monitoring requirements contained within the CAAPP permits exceed that which is necessary to satisfy statutory requirements and are overly burdensome. In fact, sources have inappropriately questioned the breadth of and authority for a number of the requirements.

As a general matter and as previously mentioned, the purpose of periodic monitoring is to assure compliance. As the requirements at issue are intended to assure compliance, these requirements simply do not exceed the Illinois EPA's authority under CAAPP. Further, under any circumstance, the requirements of concern fall within the Agency's general statutory authorization to further the purposes of the Act.

The Illinois EPA acknowledges the sources are subject to a number of regulatory provisions requiring continuous monitoring systems (CMS), and thus possess CMS on the coal-fired boilers for a number of pollutants. The existence of these CMS was factored into the periodic monitoring analysis for the plants. The recordkeeping and reporting is driven by the existence or lack of CMS, and, of necessity, requires records and more frequent reporting where no CMS exists. For example, as there exist no CMS for PM at these plants, deviations from these standards require reporting within 15 to 30 days, depending on the nature of the unit. This is in contrast with SO₂, NO_x, and opacity for which CMS are in place on the coal-fired boilers and for which deviations are generally to be reported quarterly.

The nature of the periodic monitoring is also related to the degree of operational flexibility provided by the permits. For example, the permits allow the coal-fired boilers that also have the ability to burn oil or gas as a principal fuel, to switch to operation with these fuels, either in whole or in part. This is reasonable, as it allows flexibility in operation, allowing sources to respond to operational issues and fuel costs. It is also required as such sources have addressed these alternative modes of operation in their applications. However, it is also appropriate for such sources to notify the Illinois EPA of such changes. This should preferably occur a week in advance or concurrent with the change, if it was not anticipated. This is appropriate as such changes may have other ramifications for operation of the plants for which the Illinois EPA should be aware. Certainly, switching back to coal, after such an alternative mode of operation, warrants potential review by the Illinois EPA to confirm that systems are fully operational. Likewise, switching away from coal may have implications for the level of control that must be achieved. In such circumstances, it would be wholly inappropriate for the Illinois EPA to allow such operational changes to be reported in the quarterly report, which depending on timing, could be anywhere between 30 to over 100 days after the change in operation.

Another example of divergent views on what is and is not appropriately required by the permit pertains to quarterly CMS reports under the Acid Rain Program. The sources request that the CAAPP permits not require the submittal to the Illinois EPA of those reports required to be submitted to USEPA under the Acid Rain Program. As a threshold matter, the requirement for reporting this information to the Illinois EPA is clearly consistent with and authorized by the CAAPP. Secondly, as the information is provided to USEPA in electronic form, submittal to Illinois EPA can hardly be characterized as burdensome. In addition, the comments gloss over a significant fact; the requirement for submittal of the information to the Illinois EPA is an applicable requirement which cannot be avoided and from which the source cannot be shielded.

In sum, consistent with its statutory authority and based on a reasoned analysis, the Illinois EPA has worked to craft conditions that assure compliance in a manner that is commensurate with the emission unit and regulatory requirements at issue.

Prompt Reporting

Concern exists for whether certain reporting provisions satisfy the statutory prompt reporting requirement. More specifically, concern was expressed for a number of conditions that allow reporting of certain “deviations” with quarterly reports for the boilers.

The CAAPP requires the inclusion of requirements for the “prompt reporting” of “deviations” from permit requirements. Neither the CAAPP nor the federal rules upon which the CAAPP is based and was approved by USEPA define the term prompt. Rather, 40 CFR Part 70.6(a)(3)(iii)(B) intended that the term have flexibility in application and that the permitting authority define the term relative to the “applicable requirement” at issue, the “type of deviations likely to occur” for which reporting may be required, and the period in which the deviation may need to be reported.

To this end, “prompt reporting” may be appropriately addressed generally or specifically. The CAAPP and these particular permits include general and unit-specific reporting requirements. Where the permit includes unit-specific reporting this is generally in lieu of, but may be in addition to, the general reporting requirement. The precise reporting schemes are case-specific and delineated for the different emission units and groups of units in the CAAPP permit for each plant. The conditions at issue require reporting of deviation no less frequently than quarterly, and, in certain instances, within 30 or 15 days of an incident.

The USEPA is on record in other matters and in responses to petitions as having determined that reporting on a quarterly basis can satisfy the prompt reporting requirement. This timing for deviation reporting is considered by the Illinois EPA when a source or emission units at a source warrant quarterly reporting to address operation, independent of the occurrence of any deviations. This is the case for these plants, as they

are required to perform continuous monitoring for the coal-fired boilers, for which quarterly monitoring reports are appropriate. Accordingly, reporting of deviations has generally been combined in, or coordinated with these quarterly reports so that the overall performance of the plants can be reviewed in a comprehensive fashion. This will allow a more effective and efficient review of the overall performance of the source by the Illinois EPA and other interested parties, as well as by the source itself.

At the same time, there are certain deviations for which more prompt reporting is still appropriate. These are deviations for which individual attention or concern may be warranted by the Illinois EPA, USEPA, and other interested parties. For these CAAPP permits, such attention has been placed primarily on deviations that could represent substantial violations of applicable emission standards or lapses in control measures at the source. For these purposes, depending on the deviation, immediate notification may be required and proceeded by a follow-up report submitted within 15 days, during which time the source may further assess the deviation and prepare its detailed plan of corrective action. Alternatively, notification for certain deviations may simply be required in 30 days.

Notwithstanding, in response to public comments and the USEPA's responses to petitions, the Illinois EPA has enhanced certain reporting requirements in the permits for these power plants. The reporting requirements, as revised, have already been generally described in the Section of this Responsiveness Summary entitled General Explanation of Coal-Fired Power Plant Permits.

Permit Shield

The extent of a permit shield provided by these CAAPP permits is generally addressed in Condition 8.1. This language is consistent with the CAAPP. Additionally, the extent of any Permit Shield is more specifically addressed by other conditions in the CAAPP permits that identify the applicable or nonapplicable regulations and control requirements to which the sources are or are not subject. A CAAPP permit does not provide any permit shield for regulations or requirements that are not addressed in the CAAPP permits. This approach is consistent with the CAAPP. Accordingly, the USEPA has appropriately determined in responses to petitions that the language of Condition 8.1 satisfy the requisite requirements.

Moreover, the Illinois EPA has further reviewed the non-applicability provisions in the CAAPP permits to remove or revise provisions that could be misinterpreted as providing a permit shield. Most significantly, the Illinois EPA has removed provisions stating the permits are based on certain emission units not being subject to NSPS that only apply to new, modified or reconstructed emission units. This is because these statements could be interpreted as a determination by the Illinois EPA that such units are not new, or reconstructed units. In fact, no such determination was made by the Illinois EPA for such units. The provisions in question merely reiterated representations by the sources in the CAAPP applications regarding applicable rules. The provisions at issue were intended to

memorialize the basis upon which the permits were prepared, and make clear that the source was not shielded from non-applicable requirements for new, modified or reconstructed units, if such requirements were in actual fact applicable to a unit. While sources have asked in their comments that such provisions be restored to the permits, these requests were not accompanied by the detailed documentation necessary to support their request.

Standard Permit Conditions

1. A comment was provided that Standard Permit Condition 9.2.3, entitled Duty to Cease Operation was incomplete. The June 2003 Draft CAAPP permits inadvertently failed to include the entire state statutory provision as set forth in the CAAPP in this condition. However, this condition was revised to address the concern. The revision appeared in the October 2003 proposed permits, subsequent versions of the CAAPP permits and the final CAAPP permits.

2. Public comment was received regarding Standard Permit Condition 9.12.1 entitled Permit Actions. The Illinois EPA had failed to inclusively recite the state statutory provision in the June and October 2003 versions of the CAAPP permits, but not subsequent versions of the permit.

3. Concerns were expressed for Standard Permit Condition 9.12.2(b) entitled reopening and revision because it omits the parenthetical and last sentence of Section 39.5(15)(a)(ii) of the Environmental Protection Act, which reads in full: “Additional requirements (including excess emissions requirements) become applicable to an affected source for acid deposition under the acid rain requirement. Excess emissions offset plans shall be deemed to be incorporated into the permit upon approval by USEPA.” The first of the two sentences appears in proposed CAAPP permits. However, the second sentence does not reflect the relevant procedure and has not been incorporated. As appropriately reflected in the USEPA’s responses to petitions, the failure to include this language is of no consequence, as it describes circumstances in which no changes to a CAAPP are needed.

4. Concern was expressed for Standard Permit Condition 9.10.2 entitled Emergency Provision. More specifically, concern was expressed for the use of the term “normally” and the use of examples in condition 9.10.2(a)(i) of the CAAPP permits. This term and the examples appeared in the June 2003 draft permits. However, the term and the examples have not appeared in the condition in the October 2003, later versions of the CAAPP permit and the final CAAPP permits.

Additionally, concern was expressed for the failure to address the burden of proof relative to this provision. The burden of proof is the obligation in a particular context to establish or defend a position. This burden exists as a matter of law. It is not an “applicable requirement” for CAAPP permitting purposes. That the Illinois EPA has not addressed this issue in the condition at issue or any other condition in the CAAPP permits is of no consequence.

Permit Conditions That Do Not Comply with State Regulations

1. Concern was expressed for the failure to directly address certain reporting requirements found in state regulations. For example, for the coal-fired boilers, reporting requirement found at 35 IAC 217 was not expressly included within the CAAPP permits. Rather, this reporting requirement was satisfied by a reporting requirement in the CAAPP permit set forth in general source-wide reporting. In addition, as the particular requirement is triggered by the formal request from the Illinois EPA sent to a source, soliciting copies of records, the requirement does not need to be included in the CAAPP permit to be implemented by the Illinois EPA. Nonetheless, given the concerns expressed in public comments, the Illinois EPA has explicitly included the relevant reporting requirement in the permits.

2. Concern was expressed that several conditions failed to include requirements in 35 IAC Part 201, Subpart L. First, as indicated in the October 2003 proposed permits and subsequent versions of the permits, Part 201 Subpart L does not pertain to SO₂ and NO_x. Rather, the NSPS reporting requirements, by way of the federal Acid Rain Program, are the applicable requirements. The result is that these plants with one exception, Soyland Power, are not subject to requirements of Subpart L, as Part 201 Subpart L expressly excludes sources that are subject to NSPS monitoring. Any concern for the language of these regulations or for the failure to include these regulations is misplaced as a legal matter as the provisions of concern are not applicable requirements. They are also misplaced technically as the NSPS and the Acid Rain Program represent more recent and advanced requirements for monitoring than those found in 35 IAC Part 201, Subpart L. This said, the Illinois EPA has drawn upon certain elements of 35 IAC 201.405 and the NSPS to delineate certain information that quarterly opacity reports must contain. However, any utilization of the state regulatory language is simply a means under the authority of CAAPP permitting to clarify the obligations on the source.

Credible Evidence

Concerns were raised in public comment and in petitions to the USEPA that the CAAPP permits contain conditions that limit the use of credible evidence. Concern was further expressed that the standard credible evidence provision at Condition 9.1.3 insufficiently addresses the concern.

However, as properly noted by USEPA in its responses to petitions, these concerns are ill-founded. Contrary to the expressed concerns, where the permit identifies the means by which compliance with particular emissions limits or standards or other requirements are to be measured, these identified means are not the exclusive manner by which compliance may be measured. This is true whether the permit lists one, several or even all known compliance measures. Nowhere in the source wide, unit-specific, or standard conditions in these permits does it state an exclusive means for determining compliance. In fact, the standard condition makes clear that notwithstanding any compliance measures or procedures set forth within other portions of the permit, all available means of

determining compliance may be utilized consistent with relevant legal principles and the technical issues posed with use of credible evidence.

Particular concern was expressed for a condition on the coal-fired boilers, which provides that continuous emissions monitoring shall be used to demonstrate compliance with the applicable standard. However, as discussed with respect to “periodic monitoring” CAAPP permits must include provisions by which compliance with applicable control requirements may be verified (See also Section 39.5(7)(p)(v)(B) of the Environmental Protection Act). In addition, concern was expressed with respect to that condition, which indicated that, for the boilers, compliance with the CO limitation is assumed to be inherent, or “expected,” under typical operating conditions. While the Agency maintains its technical position, it has deleted this explanatory note.

Environmental Justice

Notwithstanding the uncertain relation between EJ issues and Title V permitting, during the permitting of these coal-fired power plants, the Illinois EPA has responded to the issue of Environmental Justice in several ways. As part of the public comment period, the Illinois EPA held six public hearings across the state on the draft permits for these plants to facilitate input into the permitting process by the public. Three of the hearings, were held in areas in which a high percentage of the population is Hispanic; the Agency facilitated input from Spanish-speaking individuals. In addition, separate hearings were held for Midwest Generation LLC’s Crawford and Fisk plants, which are located approximately four miles apart in the City of Chicago, to accommodate input from the residents in the communities near each of these plants.

In response to public comments, the Illinois EPA considered the impacts of the plants on the local communities to determine whether certain plants might be contributing to disparate impacts on minority or low-income communities, as relevant for a formal evaluation of environmental justice. This review identified two plants as being of possible concern, Crawford and Fisk, in the City of Chicago, due to their filterable PM emissions. This review did not identify impacts from the coal-fired boilers on local neighborhoods that were significantly higher than PM impacts on areas further away, so as to be disparate from a geographical perspective. However, this review did identify maximum impacts, based on allowable PM emission rates from the boilers that were more than de minimis. These impacts did not occur in the local neighborhoods, but at points beyond the local neighborhoods that are several miles away from the plants. This suggests a general concern for contribution to PM air quality, but not a particular concern as related to environmental justice. For criteria air pollutants other than PM, these plants generally contribute to air quality in the Chicago metropolitan area and the region, but disparate impacts on the local neighborhood should not be expected. In addition, these impacts are associated principally with SO₂ and NO_x emissions. The emissions of these pollutants are being addressed by USEPA’s new Clean Air Interstate Rule (CAIR), which comprehensively addresses SO₂ and NO_x emissions from power plants.

The Illinois EPA also reviewed the provisions of the permits for these plants to identify possible enhancements to the provisions for control of PM emissions from the coal-fired boilers. The extent of such potential enhancements was limited, because, as already explained, CAAPP permits are intended to address existing regulations and requirements for control of emissions, not to create new control requirements. Thus these permits should not and do not set limits for PM emissions that are lower than the limits that apply under existing regulations.

However, the Illinois EPA did identify two ways in which the compliance procedures for PM emissions from the boilers could be crafted for these two plants, and for power plants in general to focus attention on particulate matter emissions. First, the timing of the initial testing of PM emissions required by the permit is staged, with testing of the Fisk and Crawford plants to occur first. Testing must occur within 180 days of the effectiveness of the testing requirement, which is the minimum amount of time needed to allow testing to be performed during cooler and thus at the maximum firing rate, as is also required during such emission testing. Second, the schedule for subsequent routine testing for PM is related to the measured test results. The base interval between required tests is nominally 12 months. (The permit specifies that these tests must be no more than 15 months apart, providing the additional three months as a contingency for unforeseen events that delay testing, such as an unexpected outage of a boiler.) The interval between these periodic tests becomes longer if the margin of compliance with the applicable PM limit is more than 20 percent. This approach to testing not only ensures compliance via periodic testing but also creates a direct incentive for sources to control emissions to a level that is significantly below the applicable regulatory limit.

A final, less direct action taken for PM emissions was the expansion of the provisions for testing. The permits require measurements of “condensable” as well as filterable PM emissions from the coal-fired boilers. Historically only filterable PM testing was required of Illinois coal-fired sources. Regulatorily, only filterable PM emissions need to be measured. This testing requirement was imposed on the coal-fired power plants in the CAAPP permits to improve the quality of the PM emission data that is available for these plants. This is of particular value, as it should assist in conducting assessments of the air quality impacts of power plants, including the Illinois EPA’s development of an attainment strategy for PM_{2.5} emissions for the Chicago metropolitan area and the Metro East area. The requirement to measure condensable PM emissions was imposed on all plants because this data is also needed for downstate plants that contribute to background air quality in urban areas. USEPA has adopted reference method 202 for conducting such measurements. While USEPA is currently working to improve Method 202, to increase its accuracy, these efforts do not prevent or invalidate the use of the current method.

Health Effects

Concern has been expressed for the effect of emissions from the coal-fired plants on public health. As such, the suggestion has been made that the Illinois EPA should limit emissions to levels below those that are required by current regulations and force the

sources to install additional control equipment. As stated elsewhere, the purpose of the CAAPP is to assure compliance with “applicable requirements.” The CAAPP does not authorize a state to impose substantive new requirements. This is particularly true where there exists no basis to do so. The applications and comments for these permits lack the information that could form the basis for the requested measures. What commentors seek are newer, more stringent regulations. This is simply not something that would be accomplished through permitting, much less CAAPP permitting. Rather, this is something that must be accomplished by adoption of new laws or regulations, on either the state or national level, as is occurring. This is particularly true as power plants contribute to air quality on a regional level, with long range transport, such meaningful reduction in the contribution of power plants to air quality also requires control programs that apply on a regional level.

Opacity

A. 8-Minute Aggregate Provision

Concern has been expressed by the sources that the permits inappropriately restrict a source’s ability to rely on 35 IAC 212.123(b), a provision of the opacity rule that allows for opacity levels higher than the generally applicable limit of 30 percent in certain narrowly defined circumstances. This is because the permits require sources to give advance notice of changes in the methodology that will be used to show opacity levels qualify for this provision. This notification requirement is appropriate given the nature of the exclusion, the means by which opacity is measured, and historic experience with this rule. While the permit appropriately develops the nature of the information that sources will have to possess to take advantage of this provision, this elaboration does not assure that a source understands and is acting appropriately to demonstrate that it qualifies for this provision. In particular, the provision requires a determination of opacity over a period of 8 minutes, which is not supported by the 6-minute averages routinely used to determine opacity. It also requires coordination of opacity data from all the emission units at most of the plants, rather than the consideration of opacity data on an individual unit basis. As such, the verification of the adequacy of a source’s methodology is best reviewed on an individualized basis when action is actually occurring. In this regard, it is similar to the performance of emission testing, for which a protocol is warranted, not withstanding the extensive regulations that set forth the procedures to be used for testing emissions.

B. Applicability of Opacity Limitation

Certain sources claim that certain emission units are fugitive emission units, rather than process emission units, so as to be excluded from the state opacity limitation, at 35 IAC 212.123. Nothing in the State’s air pollution control regulations states that the opacity limitation does not apply to fugitive emission units. The regulations at issue broadly apply to “emission units.” Moreover, while not applicable to these power plants, elsewhere in the State’s air pollution control regulations, opacity limitations are specifically set for fugitive particulate matter emissions at marine terminals, roadways, parking lots and storage piles. It is improper to suggest that the only limitation applicable

to the units at issue is 35 IAC 212.301, which provides particulate matter emission may not be visible looking directly overhead at the property line.

C. Opacity Surrogate for PM

For the coal-fired boilers, the permits generally rely on opacity as a means to indirectly address emissions of PM. For this purpose, the permits require that the sources identify the level of opacity at which compliance with the applicable PM standard is assured. This level is described as an “upper bound of the 95 percent confidence level” of opacity. This terminology recognizes that even during normal operation of a boiler, there is variability in the opacity, that is, a range of opacity levels. The source is charged with identifying the upper bound, i.e., the highest value, within this range within which compliance with the PM limit can be assured. In this regard, sources are not being asked to determine a theoretical value for the level of opacity that might correlate with compliance/noncompliance with the PM standard. They are instead being asked to undertake a more pragmatic task to evaluate the range of opacity in which a boiler normally operates. The resulting value is then used as the initial reference point with monitored opacity to differentiate operation of a boiler in a range within which the source believes that compliance with the PM emission limit is assured from other operation of that boiler.

The key data for this showing will be test data for PM emissions, with associated opacity data. This data may also be supplemented with other analytical data as part of diagnostic work performed on an ESP or other engineering evaluation.

Sources are required to submit this value to the Illinois EPA, along with supporting explanation and documentation. This allows for independent review of this information by the Illinois EPA and others. At a more basic level, it assures that the fundamental information upon which a source is relying to assure compliance with PM emission standards is in the public arena. As additional PM emission data becomes available from emission testing, the sources must review their determination. If the test data leads a source to revise the value, the source must submit the new value (or values) to the Illinois EPA with a new evaluation and supporting documentation. In this regard, the Illinois EPA would anticipate that the value would only become higher, as additional data demonstrates that compliance can still be assured at higher levels of opacity.

Alternatively, if test data addresses an alternative mode of operation, in a circumstance where a boiler has two or more distinct modes of operation, a separate value can be prepared for each mode of operation, with separate explanation and documentation for distinct mode of operation.

This approach reflects a careful consideration of the technical circumstances of the coal-fired boilers at these plants, which, with only two exceptions, are equipped with ESP for control of PM emissions. Technically, opacity has a long history of being used as an indicator for PM emission. Opacity can be monitored on a continuous basis and directly provides a quantitative measurement that is indicative of the overall performance of the PM control devices on a particular boiler. Use of opacity avoids reliance on the detailed operating parameters of the various PM control devices on an emission unit. In this

regard, the ESPs used on the boilers at these plants are best considered a number of separate control devices, each with their individual electrical systems. Thus, the performance of an ESP may be the aggregate result of the performance of 16, 24 or more separate sections, depending on the size and design of an ESP. These sections are arranged both across the gas flow and in series, so that the performance of no individual section is critical to the overall performance of the ESP. In addition to being affected by its electrical parameters (voltages), the performance of each section is also affected by factors that cannot be measured, such as buildup of ash on the collecting plates, re-entrainment of ash during rapping, variation in resistivity of the fly ash, gradual deterioration of the collecting plates and breakage of discharge wires. All these factors should be considered and accounted for in the design and maintenance of an ESP, as an ESP must still perform adequately when it is approaching the next scheduled maintenance. However, these factors do mean that for purposes of periodic monitoring required under these CAAPP permits, continuous opacity monitoring is a far more practical technique than reliance on monitoring of operating parameters for addressing the operation and performance of an ESP.

This approach also reflects the current circumstances of these plants with respect to the test data that is available for PM emissions, and opacity levels and values of ESP operating parameters during such tests. The lack of such data would prevent establishment of opacity levels, or ESP operating parameters, at this time that can be precisely coordinated with compliance with the applicable PM emission standards. However, it is possible to set levels of opacity that can reliably assure compliance with such standards. Exceedance of such levels could not be considered to indicate violations of the PM standards. Rather they would constitute periods of operation whose compliance status is uncertain, which must be pursued with further evaluation by the source on a case-by-case basis.

The sources have generally “objected” to the use of opacity as a surrogate for the PM emitted from their coal-fired boilers. These objections are not well founded. Opacity is certainly not a perfect surrogate for PM emissions, however, this is not uncommon with surrogates, which by their very nature, stand in place of another. Still, opacity monitoring has a long history of being used to assess the performance of PM control devices. In this regard, opacity is certainly a robust means to distinguish compliant operation of a coal-fired boiler and its ESP from impaired operation, for which further investigation or remedial action should be initiated. This is the approach that has generally been taken historically with opacity. This is also the approach that has been taken in these permits with respect to opacity monitoring.

Moreover, the sources have not come forward with an alternative approach in place of reliance on opacity monitoring as the primary surrogate for PM emissions on a day in, day out basis. Indeed, these same sources also acknowledge that ESP performance also is not a measure for establishing quantitative PM emission levels. They suggest that stack tests are the only means to demonstrate compliance with the PM emission standard. This is not a constructive comment, as stack tests cannot be conducted on a continuous basis. In this regard, the sources are effectively under a comparable obligation with respect to

performing periodic monitoring as the CAAPP permits are for providing periodic monitoring. CAAPP sources must certify compliance on an annual basis with the applicable PM limits. This necessitates use of sound methods and reasonable inquiry by sources to verify compliance with a PM standard that applies on an hour-by-hour basis. This necessitates a simple approach that readily assures compliance most if not all of the time, with detailed analytical effort to confirm compliance focused on a small number of operating hours. This is fully consistent with the approach being taken in these CAAPP permits.

From a legal perspective, a final issue is whether the CAAPP permits must set a specific level of opacity that is deemed to be equivalent to the applicable PM emission limit. As already discussed, this is not possible on a variety of levels. At a minimum, such action, if flawed, could inappropriately shield a source from the underlying PM emission standard. It would also be inevitable that such an action would be flawed as the operation of a boiler may change over time and the coal supply will also change, affecting the nature and quantity of the ash loading to the ESP. These type of changes cannot be prohibited, as they are inherent in the routine operation of coal-fired power plants. However, such changes could invalidate any pre-established opacity value. In addition, as also noted in comments by environmental organizations, there is a limited amount of historical test data to make such an exact correlation between opacity and PM. Finally, under the CAAPP, these permits do not require that such a determination be made. Rather these permits need only include such provisions as are needed to assure compliance. This can be accomplished without setting a specific level of opacity in the permits. This is not without a desirable environmental consequence, as it by necessity obligates sources to operate with ample margins of performance such that compliance with the applicable PM limits is assured.

Compliance Assurance Monitoring

Compliance Assurance Monitoring (CAM) is not relevant to initial CAAPP permits. In addition, the sources have not submitted the relevant information for the emission units at these sources upon which to make a formal determination of CAM applicability. While it is likely that most emission units supporting the coal-fired boilers at these plants will not be subject to CAM, it is not appropriate for the Illinois EPA to address this subject at this time. Accordingly, references to this issue in the permit including any non-applicability determinations have been stricken.

Section 2 - General Permit Requirements

1. Prohibitions

- c. No Owner or Operator of the CAAPP source shall cause or threaten 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 standards or limitations applicable to the source, unless this CAAPP permit granted to the source provides for such operation consistent with the Act and applicable Illinois Pollution Control Board regulations. [Section 39.5(6)(c) of the Act]

13. Start-Up, Shutdown, and Malfunction

Pursuant to Section 39.5(7)(a) of the Act, in the event of an action to enforce the terms or conditions of this permit, this permit does not prohibit a Permittee from invoking any affirmative defense that is provided by the applicable law or rule.

Section 4 - Emission Unit Requirements

4. Other Requirements

Start-Up, Shutdown, and Malfunction Breakdown Requirements

i. Authorization for State Requirements

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A. Start-Up Requirements

Pursuant to 35 IAC 201.149, 201.261, and 201.262, the source is authorized to operate in violation of the applicable requirements of Condition **Error! Bookmark not defined.** 4..2()()() during start-up. **Error! Bookmark not defined.. Error! Bookmark not defined.** The Permittee shall comply with all applicable requirements in Section 7. of this permit.

. Malfunction Breakdown Requirements

Pursuant to 35 IAC 201.149, 201.261, and 201.262, the source is authorized to continue operation in violation of the applicable requirements of Condition **Error! Bookmark not defined.** 4..2()()() during malfunction breakdown. **Error! Bookmark not defined.. Error! Bookmark not defined..** The Permittee shall comply with all applicable requirements in Section 7. of this permit.

. Shutdown Requirements

Pursuant to Section 39.5(7)(b) of the Act, the source shall comply with all applicable requirements in Section 7. of this permit during shutdown. **Error! Bookmark not defined..**

Section 7 - Other Requirements

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Start-Up Requirements

a. Start-Up Provisions

Pursuant to 35 IAC 201.149, 201.261, and 201.262, the source is authorized to operate in violation of the applicable requirements (as referenced in Section of this CAAPP permit) during start-up. The source has applied for such authorization in its application, generally describing the efforts that will be used "...to minimize start-up emissions, duration of individual starts, and frequency of start-ups." As provided by 35 IAC 201.265, authorization in this CAAPP permit for excess emissions during start-up does not shield the source from enforcement for any violation of applicable emission standard(s) that occurs during start-up and only constitutes a prima facie defense to such an enforcement action provided that the source has fully complied with all terms and conditions connected with such authorization.

- i. This authorization does not relieve the source from the continuing obligation to demonstrate that all reasonable efforts are made to minimize start-up emissions, duration of individual starts, and frequency of start-ups.
- ii. The source shall conduct start-ups in accordance with written start-up procedures prepared by the source and maintained at the source, that are specifically developed to minimize start-up emissions, duration of individual starts, and frequency of start-ups.
- iii. **Error! Bookmark not defined.Error! Bookmark not defined.**

b. Monitoring - Recordkeeping

Pursuant to Section 39.5(7)(b) of the Act, the source shall maintain the following records for start-up:

- i. Records for each individual start-up that contains at a minimum:
 - A. Date, time, duration, and description of the start-up.
 - B. Whether the most recent start-up procedures were performed. If not performed, an explanation why the procedures were not performed.
 - C. Whether normal operation was achieved in the allowed duration (as referenced in Section of this CAAPP permit). If not achieved, an explanation why normal operation was not achieved in the allowed duration.
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c. Monitoring - Reporting

Pursuant to Sections 39.5(7)(b) and (f) of the Act, the source shall submit the following reports:

i. Prompt Reporting

A Deviation Report shall be submitted to the IEPA, Compliance Section (addresses are included Attachment 3) within five (5) days if a start-up exceeded the **Error! Bookmark not defined.** estimates in the start-up procedures or **Error! Bookmark not defined.** exceeded any applicable standard or limit not authorized to be violated during start-up.

ii. Semiannual Reporting

Section 7 - Other Requirements
7. - Start-up Requirements

As part of the required Semiannual Monitoring Reports, the source shall submit a start-up report including the following at a minimum: a list of the start-ups including the date, duration, and description of each start-up where the start-up exceeded any applicable standard or limit accompanied by an explanation where the applicable start-up procedures were not performed and where normal operation was not achieved in the allowed duration.

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Shutdown Requirements

a. Shutdown Provisions

Pursuant to Section 39.5(7)(b) of the Act, the source is subject to the following during shutdown:

- i. At all times during shutdown, the source shall, to the extent practicable, operate in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether emissions were minimized during a shutdown will be based on information available to the IEPA 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.
- ii. The source shall operate in accordance with written shutdown procedures that shall include at a minimum:
 - A. Review of operating parameters during shutdown as necessary for the proper operation with appropriate adjustments to reduce emissions.
 - B. An estimate of emissions associated with the shutdown.

b. Period Monitoring - Recordkeeping

Pursuant to Section 39.5(7)(b) of the Act, the source shall maintain the following records for shutdown:

- i. Date, time, duration and the cause of shutdown.
- ii. A description of shutdown, if written operating procedures are not followed during shutdown or significant problems occur during the shutdown, including detailed explanation.
- iii. An explanation of whether excess emissions occurred that violated an applicable requirement.

c. Monitoring - Reporting

Pursuant to Sections 39.5(7)(b) and (f) of the Act, the source shall submit the following reports:

i. Semiannual Reporting

As part of the required Semiannual Monitoring Reports, the source shall submit a shutdown report including the following at a minimum: a list of the shutdowns including the date, duration, and description of each shutdown where the shutdown exceeded any applicable standard or limit accompanied by an explanation where the applicable shutdown procedures were not performed and where excess emissions occurred that violated an applicable requirement.

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Malfunction Breakdown Requirements

a. Malfunction Breakdown Provisions

Pursuant to 35 IAC 201.149, 201.261, and 201.262, the source is authorized to continue operation in violation of the applicable requirements (as referenced in Section of the CAAPP permit) during malfunction or breakdown. The source has applied for such authorization in its application, generally describing "such continued operation is necessary to prevent injury to persons or severe damage to equipment; or that such continued operation is required to provide essential services; provided, however, that continued operation solely for the economic benefit of the source shall not be sufficient for granting of permission." As provided by 35 IAC 201.265, authorization in this CAAPP permit for continued operation during malfunction or breakdown does not shield the source from enforcement for any violation of applicable emission standard(s) that occurs during malfunction or breakdown and only constitutes a prima facie defense to such an enforcement action provided that the source has fully complied with all terms and conditions connected with such authorization.

- i. Upon continued operation in violation of the applicable requirements during malfunction or breakdown, the source shall, as soon as practical, remove from service and repair the emission unit(s) or undertake other measures as described in the application so that any violation of the applicable requirements cease.
- ii. For continued operation in violation of the applicable requirements during malfunction or breakdown, the time shall be measured from the start of a particular incident and ends when violation of the applicable requirements ceases. The absence of a violation of the applicable requirements for a short period shall not be considered to end the incident if a violation of the applicable requirements resume. In such circumstances, the incident shall be considered to continue until corrective measures are taken so that a violation of the applicable requirements cease or the source takes the emission unit(s) out of service.
- iii. Following notification to the IEPA of continued operation in violation of the applicable requirements during malfunction or breakdown, the source shall comply with all reasonable directives of the IEPA with respect to such incident, pursuant to 35 IAC 201.263.
- iv. **Error! Bookmark not defined.****Error! Bookmark not defined.**

b. Monitoring - Recordkeeping

Pursuant to Section 39.5(7)(b) of the Act and 35 IAC 201.263, the source shall maintain records of continued operation in violation of the applicable requirements during malfunction or breakdown. The records shall include the following, at a minimum:

- i. Date and duration of the malfunction or breakdown.
- ii. A detailed explanation of the malfunction or breakdown.
- iii. An explanation why the emission unit(s) continued operation.
- iv. The measures used to reduce the **Error! Bookmark not defined.** and the duration of the event.
- v. The steps taken to prevent similar malfunctions or breakdowns and reduce their frequency and severity.

c. Monitoring - Reporting

Pursuant to Sections 39.5(7)(b) and (f) of the Act and 35 IAC 201.263, the source shall provide the following notification and reports to the IEPA, Compliance Section and Regional Field Office (addresses are included in Attachment 3) concerning continued operation in violation of the applicable requirements during malfunction or breakdown:

i. Prompt Reporting

When continued operation in violation of the applicable requirements during malfunction or breakdown:

- A. The source shall notify the IEPA's regional office by telephone or email as soon as possible during normal working hours, but no later than three (3) days, upon the occurrence of noncompliance due to malfunction or breakdown.
- B. Upon achievement of compliance, the source shall give a written follow-up notice within 15 days to the IEPA, Air Compliance Section and Regional Field Office, providing a detailed explanation of the event, an explanation why continued operation was necessary, the length of time during which operation continued under such conditions, the measures taken by the source to minimize and correct deficiencies with chronology, and when the repairs were completed or when the unit(s) was taken out of service.
- C. If compliance is not achieved within 5 working days of the occurrence, the source shall submit interim status reports to the IEPA, Air Compliance Section and Regional Field Office, within 5 days of the occurrence and every 14 days thereafter, until compliance is achieved. These interim reports shall provide a brief explanation of the nature of the malfunction or breakdown, corrective actions accomplished to date, actions anticipated to occur with schedule, and the expected date on which repairs will be complete or the emission unit(s) will be taken out of service.

ii. Semiannual Reporting

As part of the required Semiannual Monitoring Reports, the source shall submit a semiannual malfunction breakdown report including the following at a minimum:

- A. A listing of all malfunctions and breakdowns where the malfunction breakdown exceeded any applicable standard or limit, in chronological order, that includes: the date, time, and duration of each incident; and identity of the affected operation(s) involved in the incident.
- B. Dates of the notices and reports required by Prompt Reporting requirements of 7.(c)(i) above.
- C. If there have been no such incidents during the reporting period where the malfunction breakdown exceeded any applicable standard or limit, this shall be stated in the report.

217/785-1705

CONSTRUCTION PERMIT/PSD APPROVAL -- REVISED
NSPS SOURCE

PERMITTEE

Dynegy Kendall Energy, LLC
Attn: Alan M. Bargender, Plant Manager
1401 County Line Road
Minooka, Illinois 60447

Application No: 98110017

I.D. No.: 093808AAD

Applicant's Designation:

Initial Date Received: November 5, 1998 Initial Date Issued: June 2, 1999

Date Revision Request Received: September 16, 2010

Date Revision Issued: December 26, 2014

Subject: Electric Generation Facility

Location: Kendall County Generation Facility, 1401 County Line Road, Minooka

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of 4 combustion turbines (CT) and associated heat recovery steam generator (HRSG) each with supplemental firing, and ancillary operations as described in the above referenced application and summarized in Attachment A. This Permit is granted based upon and subject to the findings and special conditions which follow:

In conjunction with this permit, approval is given with respect to the Prevention of Significant Deterioration of Air Quality Regulations (PSD) to construct the above referenced project, in that the Illinois Environmental Protection Agency (Illinois EPA) finds that the application fulfills all applicable requirements of 40 CFR 52.21. This approval is issued pursuant to the Clean Air Act, as amended, 42 U.S.C. 7401 *et. seq.*, the Federal regulations promulgated thereunder at 40 CFR 52.21 for Prevention of Significant Deterioration of Air Quality (PSD), and a Delegation of Authority agreement between the United States Environmental Protection Agency and the Illinois EPA for the administration of the PSD Program. This approval becomes effective in accordance with the provisions of 40 CFR 124.15 and may be appealed in accordance with the provisions of 40 CFR 124.19. This approval is also based upon and subject to the following findings and conditions which follow:

Findings for Revised Permit

- 1a. Dynegy Kendall Energy, LLC (Kendall Energy) requested changes to this construction permit to clarify certain short-term emission limits that apply to the generating units at this facility in each mode of operation. The requested clarifications involve the emission limits in pounds/mmBtu and pounds/hour set by Condition 10(a) and Tables 1A and 1B in Attachment A of this permit. The requested changes do not involve emission limits for the units set as Best Available Control Technology (BACT).

- b. This natural gas-fired electric generation facility has four combustion turbines (CT) equipped with heat recovery steam generators (HRSG). In addition to firing fuel in the CTs, the CT/HRSG also have the capability for to fire natural gas using separate "duct burners" located in the ductwork between the CT and the HRSG. This mode of operation increases the amount of power generated by the units.
2. The Illinois EPA determined that the clarifications to the permit sought by Kendall Energy would comply with all applicable Illinois Pollution Board Regulations and the federal PSD regulations.
3. A copy of the application, the project summary and a draft of this revised permit were placed in a location in the vicinity of the project, and the public was given notice and an opportunity to examine this material and to submit comments and to request a public hearing on this matter.

The Illinois EPA is issuing this permit and approval subject to the following special conditions and consistent with the specifications and data included in the application. Any departure from the conditions of this approval or terms expressed in the application would need to receive prior written authorization by Illinois EPA.

Conditions

1. Standard conditions for issuance of construction permits, attached hereto and incorporated herein by reference, shall apply to this project, unless superseded by the following special conditions.
2. Each combustion turbine (CT) is subject to the following requirements.
 - a. Each CT shall be equipped, operated, and maintained with dry low NO_x combustors and a selective catalytic reduction (SCR) system in the HRSG to reduce emissions of NO_x.
 - b. The emissions of NO_x from each CT/HRSG shall not exceed 4.5 ppmvd at 15% O₂ on an hourly average, except during startup, malfunction, shutdown or periodic tuning as addressed by Condition 3.
 - c. The CT and duct burners shall be maintained and operated with good combustion practice to reduce emissions of CO, VOM, and PM.
- 3a. At all times, each CT/HRSG shall be operated in a manner consistent with good air pollution control practice to minimize emissions of NO_x including:
 - i. Operation in accordance with the manufacturer's written instructions or other written instructions developed by the Permittee;
 - ii. Review of operating parameters of the CT during startup, malfunction, breakdown, or shutdown as necessary to make adjustments to minimize NO_x emissions.

- iii. Operation of the SCR system as soon as and as long as the unit operating conditions are amenable to its effective use, except when precluded during periodic tuning.
 - iv. Review of the operating parameters of the CT/HRSO during startup, malfunction, breakdown or shutdown of the duct burners or steam augmentation as necessary to make adjustments to minimize NO_x emissions.
- b. Upon malfunction of the SCR system that will result in NO_x emissions in excess of Conditions 2(b).
- i. The Permittee shall as soon as practicable repair the affected system or remove the CT from service so that excess emissions cease.
 - ii. Consistent with the above, the Permittee shall begin shutdown of the CT within 90 minutes, unless the malfunction is expected to be repaired in 120 minutes or such shutdown would threaten the stability of the regional electrical power system. In such case, shutdown of the CT shall be undertaken when it is apparent that repair will not be accomplished within 120 minutes or shutdown would not endanger the regional power system. In no case shall shutdown of a CT be delayed solely for the economic benefit of the Permittee.
- 4a. The fuel heater shall be equipped with low-NO_x burners designed to emit no more than 0.15 lb NO_x/million Btu heat input (HHV) on an hourly average.
- b. The fuel heater shall be maintained and operated with good combustion practice to reduce emissions of CO, VOM, and PM.
- 5a. The cooling towers shall each be equipped, operated, and maintained with drift eliminators designed to limit the loss of water droplets from the cooling tower to not more than 0.001% of the circulating water flow.
- b. Good operating practices shall be followed for the cooling tower to maintain the level of dissolved solids in the cooling tower blowdown to not more than 5,750 mg/L, composite daily sample.

Conditions 2, 3, 4, and 5 represent the application of the Best Available Control Technology as required by Section 165 of the Clean Air Act. This permit is issued based on BACT for SO₂ being provided because natural gas is the only fuel proposed for use.

- 6a. The combustion turbines (CT) are subject to the New Source Performance Standard (NSPS) for Stationary Gas Turbines, 40 CFR 60, Subparts A and GG. The Illinois EPA is administrating NSPS in Illinois on behalf of the United States EPA under a delegation agreement.
- i. The NO_x emissions from each CT shall not exceed the limit established by the NSPS, pursuant to 40 CFR 60.332(a)(1).

- ii. The emission from each CT shall not contain SO₂ in excess of 0.015 percent by volume at 15% O₂ and on a dry basis or the CT shall not burn any fuel which contains sulfur in excess of 0.8 percent by weight, pursuant to 40 CFR 60.333 (a) and (b).
 - b. The duct burners in the HRSG are subject to the New Source Performance Standard (NSPS) for Electric Utility Steam Generating Units, 40 CFR 60, Subparts A and Da. The Illinois EPA is administrating NSPS in Illinois on behalf of the United States EPA under a delegation agreement.
 - i. The NO_x emissions from each HRSG's duct burner shall not exceed the limit set by the NSPS, pursuant to 40 CFR 60.44a(d)(1).
 - ii. The SO₂ emissions from each HRSG's duct burner shall not exceed 0.20 lb/mmBtu, pursuant to 40 CFR 60.43a(b)(2).
 - iii. The PM emission from each HRSG's duct burner shall not exceed 0.03 lb/mmBtu, pursuant to 40 CFR 60.42a(a)(1).
 - c. At all times, the Permittee shall maintain and operate the CT's and HRSG duct burners in a manner consistent with good air pollution control practice for minimizing emissions, pursuant to the NSPS, 40 CFR 60.11(d).
- 7a. The emission of smoke or other particulate matter from a CT or fuel heater shall not have an opacity greater than 30 percent, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 201.149, 212.123(b) or 212.124.
- b. When the duct burner in a HRSG is being fired, the emission of smoke or other particulate matter from the CT/HRSG system shall not have an opacity greater than 20 percent, pursuant to 40 CFR 60.42a(b) and 35 IAC 212.122(a), except for one 6-minute period per hour of not more than 27 percent opacity, as further allowed by 40 CFR 60.42a(b). Pursuant to 40 CFR 60.46a(c), this opacity standards shall apply at all times except during periods of startup, shutdown and malfunction as defined by 40 CFR 60.2.
8. Deleted (This Condition in the original permit addressed simple cycle operation of the CTs.)
- 9a.
 - i. The only fuels fired in the CT shall be natural gas, as defined in 40 CFR 60.331.
 - ii. Duct burners and the fuel heater shall only be fired with natural gas, as defined in 40 CFR 60.331.
- 10a.
 - i. Emissions from CT/HRSGs shall not exceed the limits in Tables 1A, 1B, and 1C.
 - ii. Deleted (This Condition in the original permit addressed simple cycle operation of the CTs.)
 - iii. On a daily basis during the non-ozone season (January through April and October through December) , VOM emissions from the CT/HRSGs shall not exceed 3,725 pounds, total.

On a daily basis, VOM emissions from the CTG/HRSGs during the ozone season (May through September) shall not exceed 3000 pounds, total.

Note: These requirements are set to address the impact of the facility's VOM emissions on ozone air quality.

- b. Emissions of NO_x from the fuel heater, in total, shall not exceed 1.5 lbs/hour and 6.4 tons/year.
- c. Emissions of PM from the cooling towers, in total, shall not exceed 30.2 tons/year.
- 11a. Under this permit, each CT and each HRSG may be operated for a period of up to 180 days from initial startup to allow for equipment shakedown and emissions testing as required. This period may be extended by the Illinois EPA upon request of the Permittee if additional time is needed to complete startup or perform emission testing.
 - b. Upon successful completion of emission testing demonstrating compliance with applicable limitations, the Permittee may continue to operate the facility as allowed by Section 39.5 (5) of the Environmental Protection Act.
 - c. This Condition supersedes Standard Condition 6.
- 12a. Within 60 days after operating a CT/HRSG at the greatest load at which it will normally be operated but not later than 180 days after its initial startup, the Permittee shall perform emissions tests of the CT/HRSG as follows. These tests shall be used as the initial compliance tests to demonstrate compliance with the limits and conditions set in this permit.
 - b. Emissions shall be measured by an approved testing service at maximum load for NO_x, CO, PM, VOM, and opacity. During the initial performance tests, emissions shall also be measured at the minimum load, and four intermediate load levels for NO_x and VOM, including partial firing of the duct burners if installed, full turbine load without the duct burner, and two partial turbine loads without the duct burner. Unless the CT/HRSG is equipped with appropriately located test ports in the duct work between the CT and HRSG, compliance of the HRSG with the NSPS shall be determined by the difference between measurements with and without the duct burner in service.
 - c. The following USEPA methods and procedures shall be used for testing of emissions, unless another USEPA method is approved or specified by the Illinois EPA. For each turbine, measurement of NO_x and SO₂ emissions shall be conducted and data collected in accordance with the test methods and procedures specified in 40 CFR 60.335.

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Flue Gas Weight	USEPA Method 3 or 3A
Moisture	USEPA Method 4
Particulate Matter	USEPA Method 5

Nitrogen Oxides	USEPA Method 20
Opacity	USEPA Method 9
Carbon Monoxide	USEPA Method 10
Volatile Organic Material	USEPA Method 18 or 25A
PM ₁₀	USEPA Method 5* or Method 201 or 201A (40 CFR 51, Appendix M)

- * The Permittee may report all PM emissions measured by USEPA Method 5 as PM₁₀, including back half condensable particulate. If the Permittee reports USEPA Method 5 PM emissions as PM₁₀, testing using USEPA method 201 or 201A need not be performed.
- d. At least 60 days prior to the actual date of testing, a written test plan shall be submitted to the Illinois EPA for review. This plan shall describe the specific procedures for testing and shall include as a minimum:
- i. The person(s) who will be performing sampling and analysis and their experience with similar tests.
 - ii. The specific conditions under which testing shall 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 CT/HRSRG will be tracked and recorded.
 - iii. The specific determinations of emissions that are intended to be made, including sampling and monitoring locations. As part of this plan, the Permittee may set forth a strategy for performing emission testing of selected turbines provided that all turbines are fitted for testing; the identity of the CT/HRSRG to be tested is determined immediately before testing, by the Illinois EPA or otherwise randomly; and continuous emission monitoring of NO_x is present on all turbines.
 - iv. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods.
- e. The Illinois EPA shall be notified prior to these tests to enable it to observe these tests. Notification for 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 notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe testing.
- f. Three copies of the Final Reports for these tests shall be forwarded to the Illinois EPA, Compliance Section in Springfield within 30 days after the test results are compiled and finalized, in advance of the operating permit application if necessary. The Final Report from testing shall contain a minimum:
- i. A summary of results;

- ii. General information;
 - iii. Description of test method(s), including a description of sampling points, sampling train, analysis equipment, and test schedule;
 - iv. Detailed description of test conditions, including:
 - A. Fuel consumption (standard ft³);
 - B. Firing rate (million Btu/hour); and
 - C. Turbine/Generator output rate (MW).
 - v. Data and calculations, including copies of all raw data sheets and records of laboratory analysis, sample calculations, and data on equipment calibration.
- g. Submittals and notification with respect to emissions testing shall be made to the following:

Illinois Environmental Protection Agency
Division of Air Pollution Control - Regional Office
9511 West Harrison
Des Plaines, Illinois 60016
Telephone: 847/294-4000 Fax: 847/294-4018

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P. O. Box 19276
Springfield, Illinois 62794-9276
Telephone: 217/782-5811 Facsimile: 217/782-6348

- 13a. The Permittee shall install, operate, and maintain a Continuous Emissions Monitoring (CEM) system to measure emissions of NO_x from each CT/HRS to demonstrate compliance with the limitations of this permit.
- b. i. The procedures under 40 CFR 60.13 and 75.12 shall be followed for the installation, evaluation, and operation these CEM systems. Compliance with the quality assurance and quality control requirements in 40 CFR 75, Appendix B, may be used as allowed in the 40 CFR 60.334.
 - ii. The Permittee shall submit to the Illinois EPA for review and comments detailed monitoring plans as follows:
 - A. At least 30 days prior to initial startup of a CT; a plan shall be submitted describing the configuration and operation of the NO_x CEM system(s). The plan shall also state whether the Permittee is installing a SO₂ CEM system (40 CFR 75.11) rather than sulfur analysis and flow monitoring equipment in accordance with 40 CFR 75.11(e).

- B. At least 30 days prior to initial startup of a HRSG; a plan shall be submitted describing the proposed changes to the NO_x CEM system for monitoring at the discharge from the HRSG.
- c. These CEMS shall be operational and collecting data in accordance with the provisions of the Acid Rain Program.
- 14a. The Permittee shall either monitor the fuel being fired in each CT for total sulfur content pursuant to 40 CFR 60.334(h)(1) or demonstrate that the fuel for the CT meets the definition of "natural gas" in 40 CFR 60.334(u), in accordance with 40 CFR 60.334(h)(3) and (i)(2).
- b. If the Permittee relies on an allowance for fuel bound nitrogen (F-value) in the fuel for a CT for the purpose of determining compliance with Condition 6(a)(i), the Permittee shall conduct monitoring for the nitrogen content of such fuel in accordance with 40 CFR 60.335(b)(9) and (i)(2), as provided by 40 CFR 60.334(h)(2). Otherwise, monitoring of fuel nitrogen content is not required.
- 15. The Permittee shall install, operate, and maintain monitors on each CT/HRSG to measure and record fuel consumption.
- 16a. The Permittee shall maintain a file of the following items:
 - i. The heat content (HHV) of the fuel fired in the CT and HRSG's (Btu/standard ft³); and
 - ii. The sulfur content of the fuel for the CT/HRSG in accordance with Condition 14.
- b. The Permittee shall maintain the following daily records:
 - i. The quantity of fuel consumed for each CT (standard ft³);
 - ii. The quantity of fuel consumed for each duct burner (standard ft³);
 - iii. Operating hours for each duct burner; and
 - iv. Identification of each hour when a turbine is operated at less than 50% load, other than during startup, malfunction, or shutdown as addressed below in Condition 16(d).
- c. The Permittee shall keep inspection, maintenance, and repair logs with dates and nature of such activities for the following:
 - i. Each CT/HRSG, including duct burners;
 - ii. Each SCR system;
 - iii. The SCR reagent storage system;
 - iv. The fuel heater; and
 - v. Cooling tower drift eliminators.

- d. The Permittee shall maintain following records for each CT/HRSNG related to startup, malfunction and breakdown, and shutdown:
 - i. The time and date of startup, malfunction or breakdown and shutdown of the CT/HRSNG, and confirmation that standard practices were followed.
 - ii. The time and date of startup, malfunction or breakdown and shutdown of the duct burners or power augmentation in the CT/HRSNG, and confirmation that standard practices were followed.
 - iii. Each incident when operation of the CT/HRSNG or the duct burners for the HRSNG continued during malfunction or breakdown with excess emissions, including the following information:
 - A. Date and duration of malfunction or breakdown;
 - B. Description of the malfunction or breakdown;
 - C. The reason continued operation of the unit was necessary, including supporting documentation; and
 - D. The corrective actions used to reduce the quantity of emissions and the duration of the incident.
- e. The Permittee shall maintain following records for each CT/HRSNG related to periodic tuning:
 - i. The date and duration of periodic tuning of the CT/HRSNG and/or associated SCR control system;
 - ii. The reason for tuning (e.g., regularly scheduled or special purpose), scope of tuning (e.g., performance of the CT, SCR and/or duct burner) and identity and employer of individual(s) supervising tuning;
 - iii. Identification of each operating scenario for which tuning is performed, with the emission rates before and after tuning and a summary of the adjustments that were made to settings for operating parameters; and
 - iv. Recommendations, if any, for additional tuning or maintenance/repair to be performed for the unit.
- f. The Permittee shall keep the following records with regards to emissions:
 - i.
 - A. NO_x emissions from each CT/HRSNG recorded hourly, quarterly, and annual (in lbs/mmBtu) by combining the NO_x concentration (in ppm) and diluent concentration (in percent O₂ or CO₂) measurements according to the procedures in 40 CFR 75 Appendix F;
 - B. NO_x emissions from each CT/HRSNG recorded during periodic tuning and each startup, malfunction or breakdown and

shutdown during operation with duct burners or steam augmentation (in lbs/event).

- ii. Monthly emissions of NO_x, CO, SO₂, VOM, and PM from each CT/HRSG and fuel heater (tons/month). NO_x emissions from each CT/HRSG shall be based on data from the CEM. All other emissions shall be calculated based on fuel consumption data and site-specific emission factors developed from emission test data or manufacturer's published emission rates; and
 - iii. Annual plant emissions of NO_x, CO, SO₂, VOM, and PM, based on monthly emission totals.
- g. The Permittee shall keep following records for the cooling towers:
- i. A file containing the manufacturer's specification for drift loss from the cooling towers with supporting documentation.
 - ii. Records for the solids contents of the cooling tower water, on a daily composite basis, as determined by sampling and analysis.
 - iii. Records for the actions used to routinely verify the solids contents of the cooling tower such as grab sampling and analysis, NPDES sampling and analysis, conductivity measurements, etc., including:
 - A. A written description of the procedures, with explanation of how they act to address compliance.
 - B. Records for implementation of the procedure, including measured value(s) of relevant parameter(s).
 - iv. Records for the amount of water circulated in the cooling towers, gallons/month.
 - v. Records for emission of particulate matter from the cooling towers (ton/month and ton/year), with supporting calculations.
17. All records required by this permit shall be retained on site for a period of at least 3 years and shall be made available for inspection and copying by the Illinois EPA upon request.
- 18a. For each CT and HRSG, the Permittee shall fulfill applicable notification requirements of the NSPS, 40 CFR 60.7(a), including notifications for date of commencement of construction, anticipated date of initial startup and actual date of initial startup. With the notification for commencement of construction, the Permittee shall identify the manufacturers and model of the turbine, HRSG, and SCR that it has selected and provide a copy of the manufacturer's guarantee for emissions.
- b. The Permittee shall submit quarterly operating reports and emission data that include the following information for each CT/HRSG.
- i. Number of startups, average duration of startup and total hours of operation;

- ii. Number of duct burner events and duration of such operation;
 - iii. Number of power augmentation events and duration of such operation;
 - iv. Number of malfunction events and duration of such operation; and
 - v. Number of periodic tuning events and duration of such operation.
- c. In the event continued operation of a CT/HRSO with excess NO_x emissions during a malfunction of the SCR system is expected to occur for more than 90 minutes, as addressed by Condition 3(b), the Permittee shall promptly notify the Illinois EPA's regional office of the malfunction and the reason for continued operation.
- 19a. If there is an exceedance of the requirements of Condition 2 through 10 of this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include a description of the exceedance, a copy of relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
- b. The Permittee shall comply with applicable reporting requirements under the Acid Rain Program, with a single copy of such report sent to Illinois EPA, Division of Air Pollution Control, Compliance Section.
- 20a. Any required reports and notifications shall be sent to the Illinois EPA at the following address unless otherwise indicated:
- Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276
Telephone: 217/782-5811 Fax: 217/782-6348
- b. A copy of all reports and notifications, as required above, except the Annual Emission Report required by 35 Ill. Adm. Code 254, shall also be sent to the Illinois EPA at the following address:
- Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016
Telephone: 847/294-4000 Fax: 847/294-4018
- 21a. Pursuant to 40 CFR 52.21(r)(2), this permit shall become invalid if construction is not commenced within 18 months after this permit becomes effective, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable period of time. The 18 month period may be extended by the Illinois EPA upon a satisfactory showing that an extension is justified. This condition supersedes Standard Condition 1.

- b. i. This permit shall become invalid as applied to a particular CT unit if construction of such unit does not commence within 18 months after this permit becomes effective, if construction is discontinued for a period of 18 months or more, or if construction of the CT is not completed within a reasonable period of time. The 18 month period may be extended by the Illinois EPA upon a satisfactory showing from the Permittee that an extension is justified.
 - ii. This permit shall become invalid as applied to a particular HRSG unit if construction of such unit does not commence within 18 months after completion of construction of the associated CT, if construction is discontinued for a period of 18 months or more, or if construction of the HRSG is not completed within a reasonable period of time. The 18 month period may be extended by the Illinois EPA upon a satisfactory showing from the Permittee that an extension is justified.
 - c. For purposes of the above provisions, the definitions of "construction" and "commence" at 40 CFR 52.21 (b) (8) and (9) shall apply, which require that a source must enter into a binding agreement for on-site construction or begin actual on-site construction. (Also see the definition of "begin actual construction," 40 CFR 52.21 (b) (11))
22. This Permit for the above referenced project does not relieve the Permittee of the responsibility to comply with all Local, State and Federal Regulations which are part of the applicable Illinois State Implementation Plan, as well as all other applicable Federal, State, and Local requirements.

If you have any questions concerning this permit, please contact Shashi Shah at 217/785-1705.

Raymond E. Pilapil
Acting Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

REP:SRS:jws

cc: Region 1
USEPA, Region V

Attachment A: Emission Units¹

Unit I.D.	Description	Number	Rated Heat Input ² (HHV) (mmBtu/hr)	Rated Electrical Output ² (MWe)	Control
Unit 1 - 4	Combustion Turbine (CT)	4	2,166	180-220	Selective Catalytic Reduction and Low NO _x Combustors
HRSO 1 - 4	Heat Recovery Steam Generator (HRSO) with Duct Burner	4	350	---	Selective Catalytic Reduction and Low NO _x Combustors
	Fuel Heater	1	20.1	---	Low NO _x Burner
	Backup Diesel Generator (750 HP Maximum) ³	2	---	---	None
	Backup Diesel Fire Pump(300 HP Maximum) ²	1	---	---	None
	Cooling Towers	18 Cells	---	---	Drift Eliminators

1. This permit does not address natural gas fired heaters (capacity less than 2.0 mmBtu/hour, each) used for freeze protection of the HRSO as these heaters were not installed as a part of the original construction of the facility.
2. Nominal ratings per unit.
3. Unit operated on a limited basis for backup purposes. For example, diesel electric generators are needed to maintain lubrication and other auxiliary systems in the event of a power failure during shutdown. As a result, the units are not considered significant units.

Table 1A: Emission Limits for Each CT/HRSG Without Duct Burners Operating

<u>Pollutant</u>	<u>(Lbs/mmBtu¹)</u>	<u>(Lbs/Hour²)</u>
NO _x	-	36.0
CO	0.0511	93.8
PM/PM ₁₀	0.0180	36.7
VOM	0.0094	17.3
SO ₂	0.006	13.4

1. Limits are based on vendor/manufacturer data and information provided in the permit application. These limits apply in the maximum load range of the CT/HRSG and not during startup, shutdown or other operation below the maximum load range.
2. Limits are based on modeling data and information provided in the permit application. The limit for NO_x does not apply during startup, shutdown, periodic tuning or malfunction (see Conditions 2(b) and 3). The limits for CO and VOM apply when turbines are operating above 50 percent load and not during startup, shutdown or operation below 50 percent load, when the CO and VOM limits are 2,000 and 35 pounds/hour, respectively. The limits for PM/PM₁₀ and SO₂ apply at all times.

Table 1B: Emission Limits for Each CT/HRSG With Duct Burners Operating

<u>Pollutant</u>	<u>(Lbs/mmBtu¹)</u>	<u>(Lbs/Hour²)</u>
NO _x	-	41.7
CO	0.0626	136.7
PM/PM ₁₀	0.0183	43.9
VOM	0.0162	35.3
SO ₂	0.006	15.6

1. Limits are based on vendor/manufacturer data and information provided in the permit application. These limits apply in the maximum load range of the CT/HRSG and not during startup, shutdown or other operation below the maximum load range.
2. Limits are based on modeling data, vendor/manufacturer data and information provided in the permit application. The limits for NO_x does not apply during startup, shutdown, periodic tuning or malfunction (see Conditions 2(b) and 3). The limits for other pollutants apply at all times.

Table 1C: Annual Emissions (Tons/Year) for CT/HRSG

<u>Pollutant</u>	<u>Contribution (Each)</u>	<u>Limit (Total)</u>
NO _x	157.7	630.7
CO	598.8	2,395.2
PM/PM ₁₀	192.3	769.1
VOM	154.6	618.4
SO ₂	68.3	273.3

The annual limits for CO, PM/PM₁₀, VOM, and SO₂ are based on continuous operation at the maximum hourly emission rate.

Table 2: Emissions from Other Significant Units (Tons/Year)

<u>Unit</u>	<u>NO_x</u> <u>(Ton/Yr)</u>	<u>CO</u> <u>(Ton/Yr)</u>	<u>PM</u> <u>(Ton/Yr)</u>	<u>VOM</u> <u>(Ton/Yr)</u>	<u>SO₂</u> <u>(Ton/Yr)</u>
Fuel heater	6.4	5.3	0.7	0.5	0.5
Cooling towers	----	----	30.2	---	---
Totals:	6.4	5.3	30.9	0.5	0.5

Attention:

Kendall Power Company LLC
Attn: John Burke, Environmental Manager
1401 County Line Road
Minooka, IL 60447

State of Illinois

CLEAN AIR ACT PERMIT
PROGRAM (CAAPP) PERMIT

[Title I and Title V Permit]

Source:

Kendall Power Plant
1401 County Line Road
Minooka, IL 60447

I.D. No.: 093808AAD
Permit No.: 03030002

Permitting Authority:

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
217/785-1705



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

CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

[Title I and Title V Permit]

Type of Application: Administrative Amendment (AA)
Purpose of Application: Revise Existing CAAPP Permit to reflect a source, owner, and operator name change

ID No.: 093808AAD
Permit No.: 03030002
Statement of Basis No.: 03030002-2005

Date Application Received: August 8, 2019
Date Issued: June 29, 2020
Permit Effective Date¹: June 30, 2020

Date Revision Received: May 26, 2021
Date Revision Issued: June 14, 2021

Expiration Date: June 30, 2025
Renewal Submittal Date: September 30, 2024

Source Name: Kendall Power Plant
Address: 1401 County Line Road
City: Minooka
County: Kendall
ZIP Code: 60447

This permit is hereby granted to the above-designated source authorizing operation in accordance with this CAAPP permit, pursuant to the above referenced application. This source is subject to the conditions contained herein. For further information on the source see Section 1 and for further discussion on the effectiveness of this permit see Condition 2.3(g).

If you have any questions concerning this permit, please contact Geoffrey Blood at 217/785-1705.

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:MTR:GJB:tan

cc: IEPA, Permit Section
IEPA, FOS, Region 1

¹ The permit renewal was issued prior to the expiration date of the existing CAAPP permit that was currently in effect at that time for the source. Terms and conditions of each CAAPP permit remain in effect for the full five-year term of the permit. For this reason, the renewed permit became effective on the first day following the expiration date of the then existing permit, as denoted above, unless that permitting action was appealed and subsequently stayed by the Pollution Control Board.

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Section 1 - Source Information

1. Addresses

Source

Kendall Power Plant
 1401 County Line Road
 Minooka, Illinois 60447

Owner

Kendall Power Company LLC
 1401 County Line Road
 Minooka, Illinois 60447

Operator

Kendall Power Company LLC
 1401 County Line Road
 Minooka, Illinois 60447

Permittee

The Owner of the source as identified in this table.

2. Contacts

Certified Officials

The source shall submit an Administrative Permit Amendment for any change in the Certified Officials, pursuant to Section 39.5(13) of the Act.

	<i>Name</i>	<i>Title</i>
<i>Responsible Official</i>	Randy O'Keefe	Plant Manager
<i>Delegated Authority</i>	No other individuals have been authorized by the IEPA.	N/A

Other Contacts

	<i>Name</i>	<i>Phone No.</i>	<i>Email</i>
<i>Source Contact</i>	John Burke	779-601-4224	John.Burke@vistracorp.com
<i>Technical Contact</i>	John Burke	779-601-4224	John.Burke@vistracorp.com
<i>Correspondence</i>	John Burke	779-601-4224	John.Burke@vistracorp.com
<i>Billing</i>	John Burke	779-601-4224	John.Burke@vistracorp.com

3. Single Source

The source identified in Condition 1.1 above shall be defined to include all the following additional source(s):

<i>I.D. No.</i>	<i>Permit No.</i>	<i>Single Source Name and Address</i>
N/A	N/A	N/A

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Section 2 - General Permit Requirements

1. Prohibitions

- a. It shall be unlawful for any person to violate any terms or conditions of this permit issued under Section 39.5 of the Act, to operate the CAAPP source except in compliance with this permit issued by the IEPA under Section 39.5 of the Act or to violate any other applicable requirements. All terms and conditions of this permit issued under Section 39.5 of the Act are enforceable by USEPA and citizens under the Clean Air Act, except those, if any, that are specifically designated as not being federally enforceable in this permit pursuant to Section 39.5(7)(m) of the Act. [Section 39.5(6)(a) of the Act]
- b. After the applicable CAAPP permit or renewal application submittal date, as specified in Section 39.5(5) of the Act, the Permittee shall not operate this CAAPP source without a CAAPP permit unless the complete CAAPP permit or renewal application for such source has been timely submitted to the IEPA. [Section 39.5(6)(b) of the Act]
- c. The Permittee shall not cause or threaten or allow the continued operation of an emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of the standards or limitations applicable to the unit, unless this CAAPP permit granted to the source provides for such operation consistent with the Act and applicable Illinois Pollution Control Board regulations. [Section 39.5(6)(c) of the Act]
- d. Pursuant to Section 39.5(7)(g) of the Act, emissions from the source are not allowed to exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act or the regulations promulgated thereunder, consistent with Section 39.5(17) of the Act and applicable requirements, if any.

2. Emergency Provisions

Pursuant to Section 39.5(7)(k) of the Act, the Owner or Operator of the CAAPP source may provide an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations under this CAAPP permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:

- a.
 - i. An emergency occurred and the Permittee can identify the cause(s) of the emergency.
 - ii. The source was at the time being properly operated.
 - iii. The Permittee submitted notice of the emergency to the IEPA within 2 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.
 - 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 requirements in this permit.
- b. For purposes of Section 39.5(7)(k) of the Act, "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the Permittee, such as an act of God, that requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operation error.

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- c. In any enforcement proceeding, an owner or operator of the source seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve the Permittee of any reporting obligations under existing federal or state laws or regulations.

3. General Provisions

a. 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, or modification; or denial of a permit renewal application. [Section 39.5(7)(o)(i) of the Act]

b. Need to Halt or Reduce Activity is 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]

c. 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. [Section 39.5(7)(a) of the Act]

d. 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 there under. [Section 39.5(7)(a) of the Act]

e. Duty to Pay Fees

- i. The Permittee must pay fees to the IEPA 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]
- ii. The IEPA shall assess annual fees based on the allowable emissions of all regulated air pollutants, except for those regulated air pollutants excluded in Section 39.5(18)(f) of the Act and insignificant activities in Section 6, at the source during the term of this permit. The amount of such fee shall be based on the information supplied by the applicant in its complete CAAPP permit application. [Section 39.5(18)(a)(ii)(A) of the Act]
- iii. Fee payment shall be made either electronically at <https://magic.collectorsolutions.com/magic-ui/Login/illinois-epa> or by check or money order payable to "Illinois Environmental Protection Agency" and sent to: Fiscal Services #2, Illinois EPA, P.O. Box 19276, Springfield, IL, 62794-9276. Include on the check: ID #, Permit #, and "CAAPP Operating Permit Fees". [Section 39.5(18)(e) of the Act]

f. Obligation to Allow IEPA Surveillance

Pursuant to Sections 4(a), 39.5(7)(a), and 39.5(7)(p)(ii) of the Act, inspection and entry requirements that necessitate that, upon presentation of credentials and other documents as may be required by law and in accordance with constitutional limitations,

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the Permittee shall allow the IEPA, or an authorized representative to perform the following:

- i. Enter upon the source'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.
- ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.
- iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
- iv. Sample or monitor any substances or parameters at any location at reasonable times:
 - A. As authorized by the Clean Air Act or the Act, at reasonable times, for the purposes of assuring compliance with this CAAPP permit or applicable requirements; or
 - B. As otherwise authorized by the Act.
- v. 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.

g. Effect of Permit

- i. Pursuant to Section 39.5(7)(j)(iv) of the Act, nothing in this CAAPP permit shall 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 the Owner or Operator of the 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 Clean Air Act.
 - D. The ability of USEPA to obtain information from the source pursuant to Section 114 (inspections, monitoring, and entry) of the Clean Air Act.
- ii. Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, pursuant to Sections 39.5(7)(j) and (p) of the Act, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements. [35 IAC 201.122 and Section 39.5(7)(a) of the Act]

h. 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 source 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]

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4. Testing

- a. 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 conditions 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 IEPA shall be submitted as specified in Condition 7.1 of this permit. [35 IAC Part 201 Subpart J and Section 39.5(7)(a) of the Act]
- b. Pursuant to Section 4(b) of the Act and 35 IAC 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
 - i. Testing by Owner or Operator: The IEPA may require the Owner or Operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the IEPA, at such reasonable times as may be specified by the IEPA and at the expense of the Owner or Operator of the emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The IEPA shall have the right to observe all aspects of such tests.
 - ii. Testing by the IEPA: The IEPA shall have the right to conduct such tests at any time at its own expense. Upon request of the IEPA, the Owner or Operator of the emission source or air pollution control equipment shall provide, without charge to the IEPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

5. Recordkeeping

a. Control Equipment Maintenance Records

Pursuant to Section 39.5(7)(b) of the Act, a maintenance record shall be kept on the premises for each item of air pollution control equipment. This record shall show the dates maintenance was performed and the nature of preventative maintenance activities.

b. Retention of Records

- i. 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]
- ii. Pursuant to Section 39.5(7)(a) of the Act, 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 different period is specified by a particular permit provision.

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c. Availability of Records

- i. Pursuant to Section 39.5(7)(a) of the Act, in response to an IEPA or USEPA request during the course of a source inspection, the Permittee shall retrieve and provide paper copies, or as electronic media, any records retained in an electronic format (e.g., computer).
- ii. Pursuant to Section 39.5(7)(a) of the Act, upon written request by the IEPA 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 IEPA. For this purpose, material shall be submitted to the IEPA within 30 days unless additional time is provided by the IEPA 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 2.9(d))

6. Certification**a. Compliance Certification**

- i. Pursuant to Section 39.5(7)(p)(v)(C) of the Act, the Permittee shall submit annual compliance certifications by May 1 unless a different date is specified by an applicable requirement or by a particular permit condition. The annual compliance certifications shall include the following:
 - A. The identification of each term or condition of this permit that is the basis of the certification.
 - B. The compliance status.
 - C. Whether compliance was continuous or intermittent.
 - D. 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.
- ii. Pursuant to Section 39.5(7)(p)(v)(D) of the Act, all compliance certifications shall be submitted to the IEPA Compliance Section. Address is included in Attachment 3.
- iii. Pursuant to Section 39.5(7)(p)(i) of the Act, all compliance reports required to be submitted shall include a certification in accordance with Condition 2.6(b).

b. Certification by a Responsible Official

Any document (including reports) required to be submitted by this permit shall contain a certification by the responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act and applicable regulations. [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included in Attachment 4 of this permit.

7. Permit Shield

- a. Pursuant to Section 39.5(7)(j) of the Act, except as provided in Condition 2.7(b) below, 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 IEPA, in acting on this permit application, has

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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. This permit shield does not extend to applicable requirements which are promulgated after May 14, 2020 (date USEPA notice started), unless this permit has been modified to reflect such new requirements.

- b. Pursuant to Section 39.5(7)(j) of the Act, 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.
- c. Pursuant to Section 39.5(7)(a) of the Act, the issuance of this permit by the IEPA does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any currently pending or future legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the IEPA or the USEPA may have against the Permittee including, but not limited to, any enforcement action authorized pursuant to the provision of applicable federal and state law.

8. Title I Conditions

Pursuant to Sections 39(a), 39(f), and 39.5(7)(a) of the Act, as generally identified below, this CAAPP permit may contain certain conditions that relate to requirements arising from the construction or modification of emission units at this source. These requirements derive from permitting programs authorized under Title I of the Clean Air Act (CAA) and regulations thereunder, and Title X of the Illinois Environmental Protection Act (Act) and regulations implementing the same. Such requirements, including the New Source Review programs for both major (i.e., PSD and nonattainment areas) and minor sources, are implemented by the IEPA.

- a. This permit may contain conditions that reflect requirements originally established in construction permits previously issued for this source. These conditions include requirements from preconstruction permits issued pursuant to regulations approved or promulgated by USEPA under Title I of the CAA, as well as requirements contained within construction permits issued pursuant to state law authority under Title X of the Act. Accordingly, all such conditions are incorporated into this CAAPP permit by virtue of being either an "applicable Clean Air Act requirement" or an "applicable requirement" in accordance with Section 39.5 of the Act. These conditions are identifiable herein by a designation to their origin of authority.
- b. This permit may contain conditions that reflect necessary revisions to requirements established for this source in preconstruction permits previously issued under the authority of Title I of the CAA. These conditions are specifically designated herein as "TIR".
 - i. Revisions to original Title I permit conditions are incorporated into this permit through the combined legal authority of Title I of the CAA and Title X of the Act. Public participation requirements and appeal rights shall be governed by Section 39.5 of the Act.
 - ii. Revised Title I permit conditions shall remain in effect through this CAAPP permit, and are therefore enforceable under the same, so long as such conditions do not expire as a result of a failure to timely submit a complete renewal application or are not removed at the Permittee's request.
- c. This permit may contain conditions that reflect new requirements for this source that would ordinarily derive from a preconstruction permit established under the authority of Title I of the CAA. These conditions are specifically designated herein as "TIN".

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- i. The incorporation of new Title I requirements into this CAAPP permit is authorized through the combined legal authority of Title I of the CAA and Title X of the Act. Public participation requirements and appeal rights shall be governed by Section 39.5 of the Act.
- ii. Any Title I conditions that are newly incorporated shall remain in effect through this CAAPP permit, and are therefore enforceable under the same, so long as such conditions do not expire as a result of a failure to timely submit a complete renewal application or are not removed at the Permittee's request.

9. Reopening and Revising Permit

a. 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 source 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]

b. Reopening and Revision

Pursuant to Section 39.5(15)(a) of the Act, this permit must be reopened and revised if any of the following occur:

- i. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- ii. Additional requirements become applicable to the source for acid deposition under the acid rain program;
- iii. The IEPA or USEPA determines that this permit contains a material mistake or that an inaccurate statement was made in establishing the emission standards or limitations, or other terms or conditions of this permit; or
- iv. The IEPA or USEPA determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.

c. Inaccurate Application

Pursuant to Sections 39.5(5)(e) and (i) of the Act, the IEPA has issued this permit based upon the information submitted by the Permittee in the permit application referenced on page 1 of this permit. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation or reopening of this CAAPP under Section 39.5(15) of the Act.

d. Duty to Provide Information

The Permittee shall furnish to the IEPA, within a reasonable time specified by the IEPA any information that the IEPA 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 IEPA copies of records required to be kept by this permit. [Section 39.5(7)(o)(v) of the Act]

10. 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

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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]

11. Permit Renewal

- a. 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 the most recent issued CAAPP permit will remain in effect until the issuance of a renewal permit. [Sections 39.5(5)(1) and (o) of the Act]
- b. For purposes of permit renewal, a timely application is one that is submitted no less than 9 months prior to the date of permit expiration. [Section 39.5(5)(n) of the Act]

12. Permanent Shutdown

Pursuant to Section 39.5(7)(a) of the Act, this permit only covers emission units and control equipment while physically present at the 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.

13. Start-Up, Shutdown, and Malfunction

Pursuant to Section 39.5(7)(a) of the Act, in the event of an action to enforce the terms or conditions of this permit, this permit does not prohibit a Permittee from invoking any affirmative defense that is provided by the applicable law or rule.

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Section 3 - Source Requirements

1. Applicable Requirements

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. Fugitive Particulate Matter

- i. Pursuant to 35 IAC 212.301 and 35 IAC 212.314, 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 at a point beyond the property line of the source unless the wind speed is greater than 25 mph.
- ii. Compliance Method (Fugitive Particulate Matter)

Upon request by the IEPA, 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. 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 IEPA, 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. Ozone Depleting Substances

Pursuant to 40 CFR 82.150(b), the Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- i. Pursuant to 40 CFR 82.156, persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices.
- ii. Pursuant to 40 CFR 82.158, equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment.
- iii. Pursuant to 40 CFR 82.161, persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program.
- iv. Pursuant to 40 CFR 82 Subpart B, any person performing service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner shall comply with 40 CFR 82 Subpart B, Servicing of Motor Vehicle Air Conditioners.
- v. Pursuant to 40 CFR 82.166, all persons shall comply with the reporting and recordkeeping requirements of 40 CFR 82.166.

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c. Asbestos Demolition and Renovation

- i. Asbestos Fees. Pursuant to Section 9.13(a) of the Act, for any site for which the Owner or Operator must file an original 10-day notice of intent to renovate or demolish pursuant to Condition 3.1(c)(ii) below and 40 CFR 61.145(b), the owner or operator shall pay to the IEPA with the filing of each 10-day notice a fee of \$150.
- ii. Pursuant to 40 CFR 61 Subpart M, Standard of Asbestos, prior to any demolition or renovation at this facility, the Permittee shall fulfill notification requirements of 40 CFR 61.145(b).
- iii. Pursuant to 40 CFR 61.145(c), during demolition or renovation, the Permittee shall comply with the procedures for asbestos emission control established by 40 CFR 61.145(c).

d. i. Acid Rain Requirements

- A. 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:

GTGZ1 - GTGZ4 (Unit 1/HRSG1 - Unit4/HRSG4)

Note: Title IV of the CAA, and other laws 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.

- B. Applicable Emission Requirements: The owners and operators of the source shall not violate applicable Title IV provisions. 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.

- C. 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 in Condition 7.6. 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.

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D. 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. 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]

ii. Compliance Method (Acid Rain)

Monitoring, Recordkeeping and Reporting

- A. 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]

e. Future Emission Standards

Pursuant to Section 39.5(15)(a) of the Act, this source shall comply with any new or revised applicable future standards of 40 CFR 60, 61, 62, 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 with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by Condition 2.6(a). This permit may also have to be revised or reopened to address such new regulations in accordance with Condition 2.9.

2. Applicable Plans and Programs

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. Fugitive PM Operating Program

Should this source become subject to 35 IAC 212.302, the Permittee shall prepare and operate under a Fugitive PM Operating Program consistent with 35 IAC 212.310 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). Any future Fugitive PM Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the Fugitive PM Operating Program is not expressly disapproved, in writing, by the IEPA within 30 days of receipt of the Fugitive PM Operating Program. In the event that the IEPA notifies the Permittee of a deficiency with any Fugitive PM Operating Program, the Permittee shall be required to revise and resubmit the Fugitive PM Operating Program within 30 days of receipt of notification to address the deficiency pursuant to Section 39.5(7)(a) of the Act.

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b. PM₁₀ Contingency Measure Plan

Should this source become subject to 35 IAC 212.700, then the Permittee shall prepare and operate under a PM₁₀ Contingency Measure Plan reflecting the PM₁₀ emission reductions as set forth in 35 IAC 212.701 and 212.703. The Permittee shall, within 90 days after the date this source becomes subject to 35 IAC 212.700, submit a request to modify this CAAPP permit in order to include a new, appropriate PM₁₀ Contingency Measure Plan.

c. Episode Action Plan

- i. Pursuant to 35 IAC 244.141, the Permittee shall have on file with the IEPA an 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.
- ii. The Permittee shall immediately implement the appropriate steps described in the Episode Action Plan should an air pollution alert or emergency be declared, as required by 35 IAC 244.169, or as may otherwise be required under 35 IAC 244, Appendix D.
- iii. Pursuant to 35 IAC 244.143(d), if an operational change occurs at the source which invalidates the Episode Action Plan, a revised Episode Action Plan shall be submitted to the IEPA for review within 30 days of the change and 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. In the event that the IEPA notifies the Permittee of a deficiency with any revision to the Episode Action Plan, the Permittee shall be required to revise and resubmit the Episode Action Plan within 30 days of receipt of notification to address the deficiency pursuant to Section 39.5(7)(a) of the Act.
- iv. The Episode Action Plan, as submitted by the Permittee on April 17, 2020, is incorporated herein by reference. The document constitutes the formal Episode Action Plan required by 35 IAC 244.142, addressing the actions that will be implemented to reduce SO₂, PM₁₀, NO₂, CO and VOM emissions from various emissions units in the event of a yellow alert, red alert or emergency issued under 35 IAC 244.161 through 244.165.
- v. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep a copy of the Episode Action Plan, any amendments or revisions to the Episode Action Plan (as required by Condition 3.2(c)), and the Permittee shall also keep a record of activities completed according to the Episode Action Plan.

d. Risk Management Plan (RMP)

- i. Pursuant to 40 CFR 68.215(a), the Permittee shall have a Risk Management Plan registered with the USEPA that includes information required by 40 CFR 68.150.
- ii. The Permittee shall keep a copy of the Risk Management Plan and shall update the Risk Management Plan with the USEPA pursuant to 40 CFR 68.190.

3. Title I Requirements

As of the date of issuance of this permit, there are no source-wide Title I requirements that need to be included in this Condition.

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4. Synthetic Minor Limits

a. i. General HAP Requirements

A. Pursuant to Section 39.5(7)(a) and (b) of the Act, the emissions of HAPs from the source shall be less than 10 tons/year for each individual HAP and 25 tons/year for all HAPs combined. Compliance with annual limits 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). This condition is being imposed so that the source is not a major source of HAP emissions and the requirements of 40 CFR Part 63, Subpart YYYY, National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines, do not apply to the source. The Permittee shall fulfill the applicable testing, recordkeeping, and reporting requirements of Conditions 3.4(a)(ii) and 3.5.

ii. Compliance Method (General HAP Requirements)

Testing

A. Pursuant to Section 39.5(7)(b) and (c) of the Act, the Permittee shall verify compliance with the requirements of Condition 3.4(a)(i), that is that this source is not a major source of HAPs, using the following testing requirements:

I. If in the previous calendar year, emissions of HAPs exceeded 80% of major source threshold for individual or total HAPs (greater than 8 tons of a single HAP or greater than 20 tons of total HAPs), then testing for HAPs shall be conducted as follows:

1. Testing shall be conducted using methods that would be acceptable under the federal National Emissions Standards for Hazardous Air Pollutants for Stationary Combustion Turbines, 40 CFR 63 Subpart YYYY. Specifically, the testing procedures detailed at 40 CFR 63.6120 of the performance tests section shall be used. For multiple turbines, the source owner or operator shall test the largest turbine which makes the largest contributions to individual and total HAP emissions.

II. The calculation as to whether the 80% of major source threshold was exceeded shall be based on records and procedures in Condition 3.4(a)(ii)(B) and (C) and shall be completed by January 31 for the previous calendar year. If testing is required, it shall be completed by September 30th.

III. Any such tests are also subject to the Testing Procedures of Condition 2.4(a) set forth in the General Permit Requirements of Section 2.

Recordkeeping

B. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of individual and combined HAP emissions, for the HAPS identified on Tables 1.4-4 and 3.1-3 from USEPA's Compilation of Air Pollutant Emission, AP-42, on a monthly and annual basis for the emission units covered by Conditions 4.1, 4.2, 4.3, and 4.4 (Unit Specific Conditions for Specific Emission Units) of this permit to demonstrate compliance with Condition 3.4(a)(i).

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- C. Pursuant to 40 CFR 63.10(b)(3), an owner or operator that source is not subject to the relevant standard because of limitations on the source's potential to emit, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with EPA guidance materials published to assist sources in making applicability determinations under Section 112, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a title V permit.

5. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

a. Prompt Reporting

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows:
 - I. Requirements in Conditions 3.1(a)(i), 3.1(b), 3.1(c), and 3.1(d).
 - II. Requirements in Conditions 3.2(a), 3.2(b), 3.2(c), and 3.2(d).
 - III. Requirements in Condition 3.4(a).
- B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- iii. The deviation reports shall contain the following information:
 - A. Date and time of the deviation.
 - B. Emission unit(s) and/or operation involved.
 - C. The duration of the deviation.
 - D. Probable cause of the deviation, if known.
 - E. Any corrective actions or preventative measures taken.

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iv. All deviation reports required in this Permit shall be identified, summarized, and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).

b. Semiannual Reporting

i. Pursuant to Section 39.5(7)(f)(i) of the Act, the Permittee shall submit a Semi-Annual Monitoring Report to the Illinois EPA, Air Compliance Section, summarizing required monitoring and identifying all instances of deviation from the permit, every six months as follows, unless more frequent reporting is required elsewhere in this Permit.

<u>Monitoring Period</u>	<u>Report Due Date</u>
January through June	July 31
July through December	January 31

ii. The Semiannual Monitoring Report must be certified by a Responsible Official consistent with Condition 2.6(b).

Note: Required monitoring includes all applicable monitoring, testing, recordkeeping, and reporting requirements. This may include monitoring requirements not addressed within the Compliance Method Sections of this Permit.

c. Annual Emissions Reporting

Pursuant to 35 IAC Part 254, the Source shall submit an Annual Emission Report to the Air Quality Planning Section, due by May 1 of the year following the calendar year in which the emissions took place. All records and calculations upon which the verified and reported data are based must be retained by the Permittee.

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Section 4 - Emission Unit Requirements

4.1 Natural Gas-Fired Turbines (CT) (Subject to NSPS - 40 CFR 60, Subpart GG)

1. Emission Units and Operations

<i>Emission Units</i>	<i>Pollutants Being Regulated</i>	<i>Original Construction Date</i>	<i>Modification/ Reconstruction Date</i>	<i>Air Pollution Control Devices or Measures</i>	<i>Monitoring Devices</i>
Unit 1-4 Natural Gas Fired Turbines (nominal 2166 MMBtu/hr each)	PM(Opacity), PM, SO ₂ , VOM, CO, and NO _x	June 1999	N/A	Low NO _x Burners and SCR 1-4	Four NO _x CEMS Four CO Monitors Four O ₂ Monitors* Four Fuel Consumption Meters**

*. The NO_x CEMS, and CO and O₂ Monitors (totaling four each) are shared with the HRSGs in Condition 4.2.

**.

The Fuel Consumption Meters are independent from the HRSGs in Condition 4.2. Each turbine and each HRSG is served by a separate fuel consumption meter; there are eight in total serving the four turbines and HRSGs.

Note: The turbines have associated heat recovery steam generators (HRSGs) which are separately addressed in Condition 4.2. The turbines and HRSGs also have applicable requirements in Section 5. The turbines can operate independently from the HRSGs or in conjunction with them.

2. Applicable Requirements

For the emission units in Condition 4.1.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act. In addition, the turbines shall comply with the applicable requirements in Section 5.

a. i. Opacity Requirements

Note: See Section 5 for conditions regarding the combined requirements for the combustion turbines and heat recovery steam generators (CT/HRSGs).

b. i. Particulate Matter Requirements (PM)

Note: See Section 5 for conditions regarding the combined requirements for the combustion turbines and heat recovery steam generators (CT/HRSGs).

c. i. Sulfur Dioxide Requirements (SO₂)

A. Pursuant to 40 CFR 60.333(b), the Permittee shall comply with the following condition:

I. The Permittee shall not burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw).

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- B. Pursuant to 35 IAC 214.301, the Permittee shall not cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

Note: See Section 5 for conditions regarding the for the combustion turbines and heat recovery steam generators (CT/HRSGs).

ii. Compliance Method (SO₂ Requirements)

Monitoring

- A. Pursuant to 40 CFR 60.334(h)(3), the Permittee may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR 60.331(u), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring. The owner or operator shall use the following source of information to make the required demonstration:
 - I. Pursuant to 40 CFR 60.334(h)(3)(i), the gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less.

Recordkeeping

- B. Pursuant to Section 39.5(7)(b) and (d) of the Act, the Permittee shall keep records of the gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel.
- C. Pursuant to Section 39.5(7)(b) and (d) of the Act, the Permittee shall keep a record containing a demonstration of maximum emission rates of the turbines (ppm) for SO₂, with supporting documentation.

d. i. Volatile Organic Material Requirements (VOM)

Note: See Section 5 for conditions regarding the for the combustion turbines and heat recovery steam generators (CT/HRSGs).

e. i. Carbon Monoxide Requirements (CO)

Note: See Section 5 for conditions regarding the for the combustion turbines and heat recovery steam generators (CT/HRSGs).

f. i. Nitrogen Oxide Requirements (NO_x)

- A. Pursuant to 40 CFR 60.332(a), after the date on which the performance test required by 40 CFR 60.8 is completed, every owner or operator subject to the provisions of 40 CFR 60, Subpart GG as specified in 40 CFR 60.332(b) shall comply with 40 CFR 60.332(a)(1).
- B. Pursuant to 40 CFR 60.332(b), electric utility stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired shall comply with the provisions of 40 CFR 60.332(a)(1).
- C. Pursuant to 40 CFR 60.332(a)(1), no owner or operator subject to the provisions of 40 CFR 60 Subpart GG shall cause to be discharged into the

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atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0075 \frac{(14.4)}{Y} + F$$

where:

STD = allowable ISO corrected (if required as given in 40 CFR 60.335(b)(1)) NO_x emission concentration (percent by volume at 15 percent oxygen and on a dry basis),

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour, and

F = NO_x emission allowance for fuel-bound nitrogen as defined in 40 CFR 60.332(a)(4).

Note. Source does not claim a NO_x emission allowance for fuel-bound nitrogen.

Note. When solved for this source the equation comes out to 153.885 PPMV @ 15% O₂.

- D. Pursuant to 35 IAC 217.706(a), the Permittee shall not cause or allow the emissions of NO_x into the atmosphere from any EGU to exceed 0.25 lbs/MMBtu of actual heat input during each ozone control period, based on a control period average for that unit.
- E. Pursuant to 35 IAC 217.706(b), notwithstanding the emission limitation in 35 IAC 217.706(a), any EGU subject to a more stringent NO_x emission limitation pursuant to any State or federal statute, including the Act, the Clean Air Act, or any regulations promulgated thereunder, shall comply with both the requirements of 35 IAC 217 Subpart V and that more stringent emission limitation.

Note: See Section 5 for conditions regarding the for the combustion turbines and heat recovery steam generators (CT/HRSGs).

ii. Compliance Method (NO_x Requirements)

Monitoring

- A. Pursuant to 40 CFR 60.334(c), for any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which does not use steam or water injection to control NO_x emissions, the owner or operator may, but is not required to, for purposes of determining excess emissions, use a CEMS that meets the requirements of 40 CFR 60.334(b). Also, if the owner or operator has previously submitted and received EPA, State, or local permitting authority approval of a procedure for monitoring compliance with the applicable NO_x emission limit under 40 CFR 60.332, that approved procedure may continue to be used.

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- I. Pursuant to 40 CFR 60.334(b) the Permittee shall maintain, operate, and quality-assure a continuous emission monitoring system (CEMS) consisting of NO_x and O₂ monitors. If the option to use a CEMS is chosen, the CEMS shall be certified, maintained and operated as follows:
1. Pursuant to 40 CFR 60.334(b)(3)(iii), because the Permittee has installed a NO_x CEMS to meet the requirements of 40 CFR part 75, and is continuing to meet the ongoing requirements of 40 CFR part 75, the CEMS may be used to meet the requirements of 40 CFR 60.334(b), except that the missing data substitution methodology provided for at 40 CFR part 75, subpart D, is not required for purposes of identifying excess emissions. Instead, periods of missing CEMS data are to be reported as monitor downtime in the excess emissions and monitoring performance report required in 40 CFR 60.7(c).

Note: 60.334(b)(1) and (2) have been streamlined with the requirements of 40 CFR part 75 which satisfies the requirements of 60.334(b)(1) and (2).

Recordkeeping

- C. Pursuant to 35 IAC 217.712(a), the Permittee shall comply with the recordkeeping requirements of 40 CFR 75 applicable to NO_x emissions during the ozone control period (May 1 - September 30 of each year), including, but not limited to, 40 CFR 75.54(b) and (d), incorporated by reference in 35 IAC 217.104.
- I. Pursuant to 40 CFR 75.54(b) (July 1, 2001), the Permittee shall record for each hour the following information on unit operating time, heat input, and load separately for each affected unit, and also for each group of units utilizing a common stack and a common monitoring system or utilizing a common pipe header and common fuel flowmeter, except that separate heat input data for each unit shall not be required after January 1, 2000 for any unit, other than an opt-in source, that does not have a NO_x emission limitation under part 76 of this chapter.
1. Date and hour
 2. Unit operating time (rounded up to nearest 15 minutes)
 3. Total hourly gross unit load (rounded to nearest MWge) (or steam load in lb/hr at stated temperature and pressure, rounded to the nearest 1000 lb/hr, if elected in the monitoring plan)
 4. Operating load range corresponding to total gross load of 1-10, except for units using a common stack or common pipe header, which may use the number of unit load ranges up to 20 for flow, as specified in the monitoring plan; and
 5. Total heat input (MMBtu, rounded to the nearest tenth).
- II. Pursuant to 40 CFR 75.54(d) (July 1, 2001), the Permittee shall record the information required by this paragraph for each affected unit for each hour, except for a gas-fired peaking unit for which the Permittee is using the optional protocol in 40 CFR Part 75, Appendix E for estimating NO_x emission rate. For each NO_x emission rate as

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measured and reported from the certified primary monitor, certified back-up monitor, or other approved method of emissions determination:

1. Component/system identification code as provided for in 40 CFR 75.53;
2. Date and hour;
3. Hourly average NO_x concentration (ppm, rounded to the nearest tenth);
4. Hourly average diluent gas concentration (percent O₂ or percent CO₂, rounded to the nearest tenth);
5. Hourly average NO_x emission rate (lb/MMBtu, rounded to nearest hundredth);
6. Hourly average NO_x emission rate (lb/MMBtu, rounded to nearest hundredth) adjusted for bias, if bias adjustment factor is required as provided for in 40 CFR 75.24(d);
7. Percent monitoring system data availability, (recorded to the nearest tenth of a percent), calculated pursuant to 40 CFR 75.32;
8. Method of determination for hourly average NO_x emission rate using Codes 1-15 in table 4; and
9. Identification code for emissions formula used to derive hourly average NO_x emission rate, as provided for in 40 CFR 75.53.

g. i. Operational and Production Requirements

- A. Pursuant to Construction Permit #98110017: [T1]
- I. Each turbine shall be equipped, operated, and maintained with dry low NO_x combustors to reduce emissions of NO_x.
 - II. The Permittee shall install, operate, and maintain monitors on each turbine to measure and record fuel consumption.
 - III. The only fuels fired in the turbines shall be natural gas, as defined in 40 CFR 60.331.

ii. Compliance Method (Operational and Production Requirements)

Recordkeeping

- A. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records that identify any periods during which a continuous monitoring system was not operational, with explanation.
- B. Pursuant to Construction Permit #98110017, the Permittee shall maintain the following records: [T1]
- I. The quantity of fuel consumed for each turbine (scf/month and scf/year).
 - II. The heat content (HHV) of the fuel fired in the CT(Btu/standard ft³).

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- III. The sulfur content of the fuel for the CT.
 - IV. Identification of each hour when a turbine is operated at less than 50% load, other than during start-up, malfunction, breakdown, or shutdown.
- C. Pursuant to Construction Permit #98110017, the Permittee shall maintain following records for each turbine related to periodic tuning: [T1]
- I. The date and duration of periodic tuning of the turbines and/or associated SCR control system.
 - II. The reason for tuning (e.g., regularly scheduled or special purpose), scope of tuning (e.g., performance of the turbines and/or SCR) and identity and employer of individual(s) supervising tuning.
 - III. Identification of each operating scenario for which tuning is performed, with the emission rates before and after tuning and a summary of the adjustments that were made to settings for operating parameters.
 - IV. Recommendations, if any, for additional tuning or maintenance/repair to be performed for the unit.

h. i. Combustion Monitoring Requirements

- A. Pursuant to Section 39.5(7)(b) of the Act, except for maintenance activities on a monitor, malfunctions of a monitor or monitoring system (including communication malfunctions between a monitor and data collection system), associated repairs, required performance evaluations, and any quality assurance or control activities, the Permittee must:
- I. Monitor continuously at all times the emission of CO; and
 - II. Operate the auto tuning system used at the Kendall Power Plant, which monitors combustion dynamics to continually adjust NOx emissions, during at least 50% of operating hours for each turbine, except during manual tuning of the turbine, peak fire for the turbine, steam injection for power augmentation, low load turndown, and malfunctions of a turbine or the associated auto-tuning system (including any communication malfunctions).
 - III. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitor to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
- B. Pursuant to Section 39.5(7)(a) of the Act, if the Permittee elects to change the method of periodic monitoring established in 4.1.2(h)(i)(A), the permittee shall submit a revision to this CAAPP permit 30 days prior to the change to address appropriate revisions to this CAAPP needed to satisfy the requirements for appropriate periodic monitoring under the Act.

3. Non-Applicability Determinations

- a. The turbines are not subject to the New Source Performance Standards (NSPS) for Stationary Gas Turbines, 40 CFR Part 60, Subpart KKKK, because the turbines did not commence construction, modification, or reconstruction after February 18, 2005 pursuant

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to 40 CFR 60.4305(a), and are therefore subject to 40 CFR Part 60, Subpart GG for Stationary Gas Turbines.

Note: To qualify for this non-applicability, the Permittee has certified that the turbines have not been modified or reconstructed after February 18, 2005.

- b. The turbines are not subject to the New Source Performance Standards (NSPS) for Greenhouse Gas Emissions for Electric Generating Units, 40 CFR Part 60, Subpart TTTT, because the turbines did not commence construction, modification, or reconstruction after January 8, 2014, pursuant to 40 CFR 60.5509(a).

Note: To qualify for this non-applicability, the Permittee has certified that the turbines have not been modified or reconstructed after February 18, 2005.

- c. The turbines are not subject to the National Emissions Standards for Hazardous Air Pollutants for Stationary Gas Turbines, 40 CFR Part 63, Subpart YYYY, because the turbines are not located at a major source of HAP emissions, pursuant to 40 CFR 63.6085.
- d. The turbines are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for Coal- and Oil-Fired Electric Utility Steam Generating Units, 40 CFR Part 63 Subpart UUUUU, because the turbines are gas fired and exempted from the rule under 63.9983(b).

Furthermore, pursuant to 40 CFR 63.9983(c), heat input means heat derived from combustion of fuel in an EGU and does not include the heat derived from preheated combustion air, recirculated flue gases or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and industrial boilers).

- e. The turbines are not subject to 35 IAC 212.321 or 212.322, due to the unique nature of such units, a process weight rate cannot be set so that such rules cannot reasonably be applied, pursuant to 35 IAC 212.323.
- f. The turbines are not subject to 35 IAC 217.141 or 35 IAC 216.121 because the turbines are not fuel combustion emission units, as defined by 35 IAC 211.2470.
- g. i. The affected turbines are not subject to 35 IAC 217 Subpart Q: Stationary Reciprocating Internal Combustion Engines And Turbines, because the affected turbines are not located at sources located in areas identified in 35 IAC 217.386(a)(2).

Note: 35 IAC 217.386(a)(2) requires that affected sources in Kendall County be located in the Township of Oswego.

- ii. The turbines are not subject to 35 IAC 217 Subpart U because the provisions of Subpart U shall not apply to any fossil fuel-fired combined cycle system with a maximum design heat input greater than 250 MMBtu/hr and that is a unit not listed in Appendix E of 35 IAC 217 and that at no time serves a generator producing electricity for sale, pursuant to 35 IAC 217.454(a)(2)(A).
- iii. The turbines are not subject to 35 IAC 217 Subpart W because pursuant to 35 IAC 217.751 the provisions of Subpart W shall not apply for any control period in 2009 or thereafter.
- h. The turbines are not subject to 35 IAC 215.301, because the turbines do not use organic material that would make it subject to 35 IAC 215.301.
- i. The turbines are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources:

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- i. For NO_x, because:
 - A. The turbines are subject to Acid Rain Program requirements, pursuant to 40 CFR 64.2(b)(1)(iii).
 - B. The turbines are subject to an emission limitation or standard for which this CAAPP permit specifies a continuous compliance determination method, pursuant to 40 CFR 64.2(b)(1)(vi).
- ii. For PM, SO₂, VOM, and CO because the turbines do not use an add-on control device to achieve compliance with an emission limitation or standard.

4. Other Requirements

a. Start-Up and Malfunction Breakdown Requirements

i. Authorization for State Requirements

A. Start-Up Requirements

Pursuant to 35 IAC 201.149, 201.261, and 201.262, the source is authorized to operate in violation of the applicable requirements identified or cross-referenced in Condition 4.1.2(a) during start-up. The Permittee shall comply with all applicable requirements in Condition 7.4 of this permit.

5. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

a. Prompt Reporting

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:
 - I. Requirements in Conditions 4.1.2(c)(i), 4.1.2(f)(i), 4.1.2(g)(i), and 4.1.2(h)(i).
 - II. Requirements cross-referenced in Condition 4.1.4(a).
- B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- iii. The deviation reports shall contain the following information:
 - A. Date and time of the deviation.
 - B. Emission unit(s) and/or operation involved.
 - C. The duration of the deviation.
 - D. Probable cause of the deviation, if known.

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E. Any corrective actions or preventative measures taken.

b. Federal Reporting

i. Pursuant to 40 CFR 60.334(j), for each affected unit that elects to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content or fuel nitrogen content under this subpart, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c). Excess emissions shall be reported for all periods of unit operation, including start-up, shutdown and malfunction. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows:

A. Pursuant to 40 CFR 60.334(j)(1)(iii), for turbines using NO_x and diluent CEMS:

I. An hour of excess emissions shall be any unit operating hour in which the 4-hour rolling average NO_x concentration exceeds the applicable emission limit in 40 CFR 60.332(a)(1) or (2). For the purposes of this subpart, a "4-hour rolling average NO_x concentration" is the arithmetic average of the average NO_x concentration measured by the CEMS for a given hour (corrected to 15 percent O₂ and, if required under 40 CFR 60.335(b)(1), to ISO standard conditions) and the three unit operating hour average NO_x concentrations immediately preceding that unit operating hour.

II. A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour, for either NO_x concentration or diluent (or both).

III. Each report shall include the ambient conditions (temperature, pressure, and humidity) at the time of the excess emission period and (if the owner or operator has claimed an emission allowance for fuel bound nitrogen) the nitrogen content of the fuel during the period of excess emissions. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in 40 CFR 60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of 40 CFR 60.335(b)(1).

B. Pursuant to 40 CFR 60.334(j)(5), all reports required under 40 CFR 60.7(c) shall be postmarked by the 30th day following the end of each 6-month period.

c. State Reporting

i. Pursuant to 35 IAC 217.712(c), the Permittee shall submit, with the report required under 35 IAC 217.702(d), the following certification statement, to be signed by a responsible official:

"I certify under penalty of law that this report 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 is, to the best of my knowledge and belief after due inquiry, 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."

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Signature

Name

Official Title

Telephone No.

Date Signed

- ii. Pursuant to 35 IAC 217.712(d), if demonstrating compliance through 35 IAC 217.706(a), by November 30 of each year beginning in 2003, submit to the Illinois EPA a report that demonstrates each EGU has not exceeded a NO_x emission rate of 0.25 lbs/MMBtu during the ozone control period.
- iii. Pursuant to 35 IAC 217.712(g), the Permittee shall submit copies of any records and data required by 35 IAC 217.712 to the Agency within 30 days after receipt of a written request by the Illinois EPA.

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4.2 Heat Recovery Steam Generators (HRSG) (Subject to NSPS - 40 CFR 60 Subpart Da)

1. Emission Units and Operations

<i>Emission Units</i>	<i>Pollutants Being Regulated</i>	<i>Original Construction Date</i>	<i>Modification/ Reconstruction Date</i>	<i>Air Pollution Control Devices or Measures</i>	<i>Monitoring Devices</i>
HRSG 1-4 Natural Gas Fired HRSG (nominal 350 MMBtu/hr each)	PM(Opacity), PM, SO ₂ , VOM, CO, and NO _x	June 1999	N/A	Low NO _x Burners and SCR 1-4	Four NO _x CEMS Four CO Monitors Four O ₂ Monitors* Four Fuel Consumption Meters**

*. The NO_x CEMS, and CO and O₂ Monitors (totaling four each) are shared with the Turbines in Condition 4.1.

** The Fuel Consumption Meters are independent from the Turbines in Condition 4.1. Each turbine and each HRSG is served by a separate fuel consumption meter; there are eight in total serving the four turbines and HRSGs.

Note: The turbines have associated heat recovery steam generators (HRSGs) which are separately addressed in Condition 4.2. The turbines and HRSGs also have applicable requirements in Section 5. The turbines can operate independently from the HRSGs or in conjunction with them. The HRSGs cannot run independently from the turbines. The HRSGs can run passively off the turbines or actively with additional heat provided by the duct burners.

2. Applicable Requirements

For the emission units in Condition 4.2.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act. In addition, the Heat recovery Steam Generators shall comply with the applicable requirements in Section 5.

a. i. Opacity Requirements

Note: See Section 5 for conditions regarding the for the combustion turbines and heat recovery steam generators (CT/HRSGs).

b. i. Particulate Matter Requirements (PM)

Note: See Section 5 for conditions regarding the for the combustion turbines and heat recovery steam generators (CT/HRSGs).

c. i. Sulfur Dioxide Requirements (SO₂)

A. Pursuant to 40 CFR 60.43Da(b)(2), the Permittee shall not cause to be discharged into the atmosphere from any HRSG, any gases that contain SO₂ in excess of 100 percent of the potential combustion concentration (zero percent reduction) when emissions are less than 86 ng/J (0.20 lb/MMBtu) heat input.

Note: See Section 5 for conditions regarding the for the combustion turbines and heat recovery steam generators (CT/HRSGs).

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- ii. Compliance Method (SO₂ Requirements)
 - A. Pursuant to 40 CFR 60.43Da(g), compliance with the emission limitation requirements under 40 CFR 60.43Da are determined on a 30-day rolling average basis.
 - B. Pursuant to 40 CFR 60.48Da(a), the SO₂ emissions limit under 40 CFR 60.43Da applies at all times except during periods of start-up, shutdown, or malfunction.
 - C. Pursuant to 40 CFR 60.48Da(d), compliance with applicable 30-boiler operating day rolling average SO₂ emissions limits is determined by calculating the arithmetic average of all hourly emission rates for SO₂ for the 30 successive boiler operating days, except for data obtained during start-up, shutdown, or malfunction.

Recordkeeping

- D. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of the 30-boiler operating day rolling average SO₂ emissions rate.

d. i. Volatile Organic Material Requirements (VOM)

Note: See Section 5 for conditions regarding the for the combustion turbines and heat recovery steam generators (CT/HRSGs).

e. i. Carbon Monoxide Requirements (CO)

- A. Pursuant to 35 IAC 216.121, the Permittee shall not cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 MMBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

Note: See Section 5 for conditions regarding the for the combustion turbines and heat recovery steam generators (CT/HRSGs).

f. i. Nitrogen Oxide Requirements (NO_x)

- A. Pursuant to 40 CFR 60.44Da(d)(1), the Permittee shall not cause to be discharged into the atmosphere from any HRSG any gases that contain NO_x (expressed as NO₂) in excess of 200 ng/J (1.6 lb/MWh) gross energy output.
- B. I. Pursuant to 35 IAC 217.706(a), the Permittee shall not cause or allow the emissions of NO_x into the atmosphere from any EGU to exceed 0.25 lbs/MMBtu of actual heat input during each ozone control period, based on a control period average for that unit.
 - II. Pursuant to 35 IAC 217.706(b), notwithstanding the emission limitation in 35 IAC 217.706(a), any EGU subject to a more stringent NO_x emission limitation pursuant to any State or federal statute, including the Act, the Clean Air Act, or any regulations promulgated thereunder, shall comply with both the requirements of 35 IAC 217 Subpart V, and that more stringent emission limitation.

Note: See Section 5 for conditions regarding the for the combustion turbines and heat recovery steam generators (CT/HRSGs).

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ii. Compliance Method (NO_x Requirements)

- A. Pursuant to 40 CFR 60.44Da(d), the NO_x limits in 40 CFR 60.44Da(d) are determined on a 30-boiler operating day rolling average basis.
- B. Pursuant to 40 CFR 60.48Da(a), the NO_x emissions limit under 40 CFR 60.44Da applies at all times except during periods of start-up, shutdown, or malfunction.
- C. Pursuant to 40 CFR 60.48Da(d), compliance with applicable 30-boiler operating day rolling average NO_x emissions limits is determined by calculating the arithmetic average of all hourly emission rates for NO_x for the 30 successive boiler operating days, except for data obtained during start-up, shutdown, or malfunction.
- D. Pursuant to 40 CFR 60.48Da(k), to determine compliance with the emission limitation for NO_x required by 40 CFR 60.44Da(d)(1) for duct burners used in combined cycle systems, the procedures described in 40 CFR 60.48Da(k)(1) or (2) may be used.
 - I. Pursuant to 40 CFR 60.48Da(k)(2), the Permittee may elect to determine compliance with the applicable NO_x emission limitation in 40 CFR 60.44Da(d)(1) on a 30-day rolling average basis as indicated in 40 CFR 60.48Da(k)(2)(i) through (iv).

Monitoring

- E. Pursuant to 40 CFR 60.49Da(c)(2), if the Permittee has installed a NO_x emission rate CEMS to meet the requirements of 40 CFR 75 and is continuing to meet the ongoing requirements of 40 CFR 75, that CEMS may be used to meet the requirements of 40 CFR 60.49Da, except that the owner or operator shall also meet the requirements of 40 CFR 60.51Da. Data reported to meet the requirements of 40 CFR 60.51Da shall not include data substituted using the missing data procedures in 40 CFR 75, Subpart D, nor shall the data have been bias adjusted according to the procedures of 40 CFR 75.
- F. Pursuant to 40 CFR 60.49Da(e), the CEMS under 40 CFR 60.49Da(c) are operated and data recorded during all periods of operation of the affected facility including periods of start-up, shutdown, and malfunction, except for CEMS breakdowns, repairs, calibration checks, and zero and span adjustments.

Recordkeeping

- G. Pursuant to 35 IAC 217.712(a), the Permittee shall comply with the recordkeeping requirements of 40 CFR 75 applicable to NO_x emissions during the ozone control period (May 1 - September 30 of each year), including, but not limited to, 40 CFR 75.54(b) and (d), incorporated by reference in 35 IAC 217.104.
 - I. Pursuant to 40 CFR 75.54(b) (July 1, 2001), the Permittee shall record for each hour the following information on unit operating time, heat input, and load separately for each affected unit, and also for each group of units utilizing a common stack and a common monitoring system or utilizing a common pipe header and common fuel flowmeter, except that separate heat input data for each unit shall not be required after January 1, 2000 for any unit, other than an opt-in source, that does not have a NO_x emission limitation under part 76 of this chapter.

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1. Date and hour
2. Unit operating time (rounded up to nearest 15 minutes)
3. Total hourly gross unit load (rounded to nearest MWge) (or steam load in lb/hr at stated temperature and pressure, rounded to the nearest 1000 lb/hr, if elected in the monitoring plan)
4. Operating load range corresponding to total gross load of 1-10, except for units using a common stack or common pipe header, which may use the number of unit load ranges up to 20 for flow, as specified in the monitoring plan; and
5. Total heat input (MMBtu, rounded to the nearest tenth).

II. Pursuant to 40 CFR 75.54(d) (July 1, 2001), the Permittee shall record the information required by this paragraph for each affected unit for each hour, except for a gas-fired peaking unit for which the Permittee is using the optional protocol in 40 CFR Part 75, Appendix E for estimating NO_x emission rate. For each NO_x emission rate as measured and reported from the certified primary monitor, certified back-up monitor, or other approved method of emissions determination:

1. Component/system identification code as provided for in 40 CFR 75.53;
2. Date and hour;
3. Hourly average NO_x concentration (ppm, rounded to the nearest tenth);
4. Hourly average diluent gas concentration (percent O₂ or percent CO₂, rounded to the nearest tenth);
5. Hourly average NO_x emission rate (lb/MMBtu, rounded to nearest hundredth);
6. Hourly average NO_x emission rate (lb/MMBtu, rounded to nearest hundredth) adjusted for bias, if bias adjustment factor is required as provided for in 40 CFR 75.24(d);
7. Percent monitoring system data availability, (recorded to the nearest tenth of a percent), calculated pursuant to 40 CFR 75.32;
8. Method of determination for hourly average NO_x emission rate using Codes 1-15 in table 4; and
9. Identification code for emissions formula used to derive hourly average NO_x emission rate, as provided for in 40 CFR 75.53.

H. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of the 30-boiler operating day rolling average NO_x emissions rate.

g. i. Operational and Production Requirements

A. Pursuant to Construction Permit #98110017: [T1]

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- I. Each HRSG shall be equipped, operated, and maintained with a selective catalytic reduction (SCR) system to reduce emissions of NO_x.
- II. Duct burners shall only be fired with natural gas, as defined in 40 CFR 60.331.
- III. The Permittee shall install, operate, and maintain monitors on each HRSG to measure and record fuel consumption.

ii. Compliance Method (Operational and Production Requirements)

Recordkeeping

- B. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain the following records:
 - I. Records that identify any periods during which a continuous monitoring system was not operational, with explanation.
 - II. Records that identify any day in which emission and/or opacity exceeded an applicable standard or limit.
- C. Pursuant to Construction Permit #98110017, the Permittee shall maintain the following records: [T1]
 - I. The quantity of fuel consumed for each duct burner (scf/month and scf/year).
 - II. The heat content (HHV) of the fuel fired in the HRSG's (Btu/standard ft³).
 - III. The sulfur content of the fuel for the HRSG's.
 - IV. Operating hours for each duct burner.
- D. Pursuant to Construction Permit #98110017, the Permittee shall maintain following records for each HRSG related to periodic tuning: [T1]
 - I. The date and duration of periodic tuning of the HRSG and/or associated SCR control system.
 - II. The reason for tuning (e.g., regularly scheduled or special purpose), scope of tuning (e.g., performance of the SCR and/or duct burner) and identity and employer of individual(s) supervising tuning.
 - III. Identification of each operating scenario for which tuning is performed, with the emission rates before and after tuning and a summary of the adjustments that were made to settings for operating parameters.
 - IV. Recommendations, if any, for additional tuning or maintenance/repair to be performed for the unit.

h. i. Combustion Inspection Requirements

- A. Pursuant to Section 39.5(7)(b) and (d) of the Act, the Permittee shall perform a combustion inspection on the duct burner at least annually. The combustion inspection must be performed by an employee of the owner or operator or a contractor who is sufficiently qualified to do so. The

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inspection shall include the following items, with scheduling of adjustments and maintenance as needed.

- I. The flame quality inside the duct burners by:
 - 1. Visual inspection through the site glass.
 - 2. Use of a flame scanner.
 - II. The clarity of the visual inspection site glass.
 - III. The condition of the fuel meter orifice every three years.
 - IV. The accuracy of the fuel meter.
- ii. Compliance Method (Combustion Inspection Requirements) Recordkeeping
- A. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain the following records for the annual combustion inspection:
 - I. The date the combustion inspection was performed.
 - II. The name, title, and affiliation of the person who performed the combustion inspection.
 - III. What the inspection found (e.g., flame quality, clarity of the site glass, condition of fuel meter orifice, the proper operation of the fuel meter).
 - IV. If needed, when adjustments or maintenance will be completed.

3. Non-Applicability Determinations

- a. The HRSGs are not subject to the New Source Performance Standards (NSPS) for Greenhouse Gas Emissions for Electric Generating Units, 40 CFR Part 60 Subpart TTTT, because the units did not that commenced construction after January 8, 2014 or commenced reconstruction after June 18, 2014 or that commenced modification after June 18, 2014 pursuant to 40 CFR 60.5509(a).
- b. The HRSGs are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63 Subpart DDDDD, because the HRSGs are not boilers by definition, pursuant to 40 CFR 63.7575. "Boiler" excludes "waste heat boilers," otherwise known as heat recovery steam generators (HRSG).
 - i. Waste heat boiler means a device that recovers normally unused energy (i.e., hot exhaust gas) and converts it to usable heat. Waste heat boilers are also referred to as heat recovery steam generators. Waste heat boilers are heat exchangers generating steam from incoming hot exhaust gas from an industrial (e.g., thermal oxidizer, kiln, furnace) or power (e.g., combustion turbine, engine) equipment. Duct burners are sometimes used to increase the temperature of the incoming hot exhaust gas.
 - ii. Boiler means an enclosed device using controlled flame combustion and having the primary purpose of recovering thermal energy in the form of steam or hot water. Controlled flame combustion refers to a steady-state, or near steady-state, process wherein fuel and/or oxidizer feed rates are controlled. A device combusting solid waste, as defined in 40 CFR 241.3, is not a boiler unless the device is exempt from the definition of a solid waste incineration unit as provided in Section 129(g)(1)

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of the Clean Air Act. Waste heat boilers are excluded from this definition.
Emphasis added.

- c. The HRSGs are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR Part 63 Subpart JJJJJJ, because the HRSGs are gas fired boilers specifically exempted from the rule under 40 CFR 63.11195(e).
- d. The HRSGs are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for Coal- and Oil-Fired Electric Utility Steam Generating Units, 40 CFR Part 63 Subpart UUUUUU, because the HRSGs are gas fired and exempted from the rule under 63.9983(b).
- e. The HRSGs are not subject to 35 IAC 212 Subpart E because the HRSGs only combust gaseous fuels.
- f.
 - i. The HRSGs are not subject to 35 IAC 214 Subpart B because the HRSGs only combust gaseous fuels.
 - ii. The HRSGs are not subject to 35 IAC 214 Subpart C because the HRSGs only combust gaseous fuels.
 - iii. The HRSGs are not subject to 35 IAC 214 Subpart D because the HRSGs only combust gaseous fuels.
 - iv. The HRSGs are not subject to 35 IAC 214.301 because the HRSGs are not process emission sources as defined by 35 IAC 211.5185. The HRSGs are fuel combustion emission units as defined by 35 IAC 211.2470.
- g. The HRSGs are not subject to 35 IAC 215.301 and 215.302 because pursuant to 35 IAC 215.303, the provisions of 35 IAC 215.301 and 215.302 shall not apply to fuel combustion emission sources. The HRSGs are fuel combustion emission units as defined by 35 IAC 211.2470.
- h.
 - i. The HRSGs are not subject to 35 IAC 217.141 because the HRSGs are "New Emission Sources" (i.e., built after April 14, 1972) as defined by 35 IAC 201.102.
 - ii. The HRSGs are not subject to 35 IAC 217 Subpart D, and by extension 35 IAC 217 Subpart E or Subpart M, because the HRSGs are not located in the Township of Oswego in Kendall County, pursuant to 35 IAC 217.150(a)(1)(A).
 - iii. The HRSGs are not subject to 35 IAC 217 Subpart U because the provisions of Subpart U shall not apply to any fossil fuel-fired combined cycle system with a maximum design heat input greater than 250 MMBtu/hr and that is a unit not listed in Appendix E of 35 IAC 217 and that at no time serves a generator producing electricity for sale, pursuant to 35 IAC 217.454(a)(2)(A).
 - iv. The HRSGs are not subject to 35 IAC 217 Subpart W because pursuant to 35 IAC 217.751 the provisions of Subpart W shall not apply for any control period in 2009 or thereafter.
- i. The HRSGs are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for:
 - i. For PM, CO, SO₂ and VOM because they do not use an add-on control device to achieve compliance with an emission limitation or standard.
 - ii. For NO_x because the HRSGs are:

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- A. Subject to an emission limitation or standard for which this CAAPP permit specifies a continuous compliance determination method, pursuant to 40 CFR 64.2(b)(1)(vi).
- B. Subject to Acid Rain Program requirements, pursuant to 40 CFR 64.2(b)(1)(iii).

4. Other Requirements

a. Start-Up and Malfunction Breakdown Requirements

i. Authorization for State Requirements

A. Start-Up Requirements

Pursuant to 35 IAC 201.149, 201.261, and 201.262, the source is authorized to operate in violation of the applicable requirements identified or cross-referenced in Condition 4.2.2(a) during start-up. The Permittee shall comply with all applicable requirements in Condition 7.4 of this permit.

5. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

a. Prompt Reporting

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:
 - I. Requirements in Conditions 4.2.2(c)(i), 4.2.2(e)(i), 4.2.2(f)(i), 4.2.2(g)(i), and 4.2.2(h)(i).
 - II. Requirements cross-referenced in Condition 4.2.4(a).
- B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- iii. The deviation reports shall contain at a minimum the following information:
 - A. Date and time of the deviation.
 - B. Emission unit(s) and/or operation involved.
 - C. The duration of the deviation.
 - D. Probable cause of the deviation, if known.
 - E. Any corrective actions or preventative measures taken.

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b. Federal Reporting

- i. Pursuant to 40 CFR 60.51Da(a), for NO_x emissions, the performance test data from the subsequent performance test and from the performance evaluation of the continuous monitors (including the transmissometer) must be reported to the Illinois EPA.
- ii. Pursuant to 40 CFR 60.51Da(b), for NO_x the following information is reported to the Illinois EPA for each 24-hour period.
 - A. Calendar date.
 - B. The average NO_x emission rates (ng/J, lb/MMBtu, or lb/MWh) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and, description of corrective actions taken.
 - C. Identification of the boiler operating days for which pollutant or diluent data have not been obtained by an approved method for at least 75 percent of the hours of operation of the facility; justification for not obtaining sufficient data; and description of corrective actions taken.
 - D. Identification of the times when emissions data have been excluded from the calculation of average emission rates because of start-up, shutdown, or malfunction.
 - E. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
 - F. Identification of times when hourly averages have been obtained based on manual sampling methods.
 - G. Identification of the times when the pollutant concentration exceeded full span of the CEMS.
 - H. Description of any modifications to CEMS which could affect the ability of the CEMS to comply with Performance Specifications 2 or 3.
- iii. Pursuant to 40 CFR 60.51Da(c), if the minimum quantity of emission data as required by 40 CFR 60.49Da is not obtained for any 30 successive boiler operating days, the following information obtained under the requirements of 40 CFR 60.48Da(h) is reported to the Administrator for that 30-day period:
 - A. The number of hourly averages available for outlet emission rates (no) and inlet emission rates (ni) as applicable.
 - B. The standard deviation of hourly averages for outlet emission rates (so) and inlet emission rates (si) as applicable.
 - C. The lower confidence limit for the mean outlet emission rate (Eo*) and the upper confidence limit for the mean inlet emission rate (Ei*) as applicable.
 - D. The applicable potential combustion concentration.
 - E. The ratio of the upper confidence limit for the mean outlet emission rate (Eo*) and the allowable emission rate (Estd) as applicable.
- iv. Pursuant to 40 CFR 60.51Da(f), for any periods for which NO_x emissions data are not available, the owner or operator of the affected facility shall submit a signed

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statement indicating if any changes were made in operation of the emission control system during the period of data unavailability. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability.

- v. Pursuant to 40 CFR 60.51Da(h), the owner or operator of the affected facility shall submit a signed statement indicating whether:
 - A. The required CEMS calibration, span, and drift checks or other periodic audits have or have not been performed as specified.
 - B. The data used to show compliance was or was not obtained in accordance with approved methods and procedures of this part and is representative of plant performance.
 - C. The minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable.
 - D. Compliance with the standards has or has not been achieved during the reporting period.
- vi. Pursuant to 40 CFR 60.51Da(j), the owner or operator of an affected facility shall submit the written reports required under this section and subpart A to the Illinois EPA semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period.
- vii. Pursuant to 40 CFR 60.51Da(k), the owner or operator of an affected facility may submit electronic quarterly reports for SO₂ and/or NO_x in lieu of submitting the written reports required under 40 CFR 60.51Da(b). The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period.

c. State Reporting

- i. Pursuant to 35 IAC 217.712(a), the Permittee shall comply with the reporting requirements of 40 CFR 75 applicable to NO_x emissions during the ozone control period.
- ii. Pursuant to 35 IAC 217.712(c), submit, with the report required under 35 IAC 217.712(d), the following certification statement, to be signed by a responsible official:

"I certify under penalty of law that this report 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 is, to the best of my knowledge and belief after due inquiry, 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."

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Signature

Name

Official Title

Telephone No.

Date Signed

- iii. Pursuant to 35 IAC 217.712(d), if demonstrating compliance through 35 IAC 217.706(a), by November 30 of each year beginning in 2003, submit to the Illinois EPA a report that demonstrates each EGU has not exceeded a NO_x emission rate of 0.25 lbs/MMBtu during the ozone control period.
- iv. Pursuant to 35 IAC 217.712(g), submit copies of any records and data required by 35 IAC 217 Subpart V to the Illinois EPA within 30 days after receipt of a written request by the Illinois EPA.

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4.3 Natural Gas-Fired Fuel Heater

1. Emission Units and Operations

<i>Emission Units</i>	<i>Pollutants Being Regulated</i>	<i>Original Construction Date</i>	<i>Modification/ Reconstruction Date</i>	<i>Air Pollution Control Devices or Measures</i>	<i>Monitoring Devices</i>
GHS-1 Natural Gas-Fired Fuel Heater (nominal 20.1 MMBtu/hr)	Opacity, PM, SO ₂ , VOM, CO, and NO _x	June 1999	N/A	Low NO _x Burners	None

2. Applicable Requirements

For the emission units in Condition 4.3.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

a. i. Opacity Requirements

A. Pursuant to 35 IAC 212.123(a), the Permittee shall not 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 35 IAC 212.122, except as provided in 35 IAC 212.123(b) and 212.124.

ii. Compliance Method (Opacity Requirements)

Monitoring

A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, at a minimum, the Permittee shall perform observations for opacity on each emission unit listed in Condition 4.3.1 in accordance with Method 22 for visible emissions at least once per calendar year. If visible emissions are observed, the Permittee shall take corrective action, if necessary, within 24 hours of such observation. Corrective action may include, but is not limited to, shutdown of the emission unit, maintenance and repair, and/or adjustment of the equipment. If corrective action was taken, the Permittee shall perform a follow up observation for visible emissions in accordance with Method 22. If visible emissions continue, then visual determination of opacity in accordance with Method 9 shall be conducted within one week.

Recordkeeping

B. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records for each observation for opacity conducted. These records shall include, at a minimum: date and time the observation was performed, name(s) of observing personnel, identification of which equipment was observed, whether or not the equipment was running properly, the findings of the observation including the presence of any visible emissions, and a description of any corrective action taken including if the corrective action took place within 24 hours of the observation.

b. i. Particulate Matter Requirements (PM)

A. Pursuant to Construction Permit #98110017, annual PM emissions from the fuel heaters shall not exceed 0.7 Ton/yr. [T1]

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ii. Compliance Method (PM Requirements)

- A. Pursuant to Section 39.5(7)(b) and (d) of the Act, compliance with the annual emission limitation 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).
- B. Pursuant to Sections 39.5(7)(b) and (d) of the Act, emissions shall be calculated based on fuel consumption data (as required in 4.3.2(g)(ii)) and emission factors for PM/PM₁₀.

The order of preference for the basis of such factors shall be: 1) on-site emission testing, 2) manufacturer's emission data, and 3) emission factors from USEPA's Compilation of Air Pollutant Emission, AP-42.

Recordkeeping

- C. Pursuant to Section 39.5(7)(b) and (d) of the Act, the Permittee shall keep records of monthly and annual PM emissions from the fuel heater (tons/month and tons/year) including emissions from start-ups, with supporting calculations including documentation on the validity of the emission factors used.

c. i. Sulfur Dioxide Requirements (SO₂)

- A. Pursuant to Construction Permit #98110017, annual SO₂ emissions from the fuel heaters shall not exceed 0.5 Ton/yr. [T1]

ii. Compliance Method (SO₂ Requirements)

- A. Pursuant to Section 39.5(7)(b) and (d) of the Act, compliance with the annual emission limitation 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).
- B. Pursuant to Sections 39.5(7)(b) and (d) of the Act, emissions shall be calculated based on fuel consumption data (as required in 4.3.2(g)(ii)) and emission factors for SO₂.

The order of preference for the basis of such factors shall be: 1) on-site emission testing, 2) manufacturer's emission data, and 3) emission factors from USEPA's Compilation of Air Pollutant Emission, AP-42, other emission factor compilations, or industry testing.

Recordkeeping

- C. Pursuant to Section 39.5(7)(b) and (d) of the Act, the Permittee shall keep records of monthly and annual SO₂ emissions from the fuel heater (tons/month and tons/year) including emissions from start-ups, with supporting calculations including documentation on the validity of the emission factors used.
- D. Pursuant to Section 39.5(7)(b) and (d) of the Act, the Permittee shall keep records of the sulfur content of the fuel fired in the fuel heater.

d. i. Volatile Organic Material Requirements (VOM)

- A. Pursuant to Construction Permit #98110017, annual VOM emissions from the fuel heaters shall not exceed 0.5 Ton/yr. [T1]

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ii. Compliance Method (VOM Requirements)

- A. Pursuant to Section 39.5(7)(b) and (d) of the Act, compliance with the annual emission limitation 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).
- B. Pursuant to Sections 39.5(7)(b) and (d) of the Act, emissions shall be calculated based on fuel consumption data (as required in 4.3.2(g)(ii)) and emission factors for VOM.

The order of preference for the basis of such factors shall be: 1) on-site emission testing, 2) manufacturer's emission data, and 3) emission factors from USEPA's Compilation of Air Pollutant Emission, AP-42, other emission factor compilations, or industry testing.

Recordkeeping

- C. Pursuant to Section 39.5(7)(b) and (d) of the Act, the Permittee shall keep records of monthly and annual VOM emissions from the fuel heater (tons/month and tons/year) including emissions from start-ups, with supporting calculations including documentation on the validity of the emission factors used.

e. i. Carbon Monoxide Requirements (CO)

- A. Pursuant to 35 IAC 216.121, the Permittee shall not cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 MMBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.
- B. Pursuant to Construction Permit #98110017, annual CO emissions from the fuel heaters shall not exceed 5.3 Tons/yr. [T1]

ii. Compliance Method (CO Requirements)

- A. Pursuant to Section 39.5(7)(b) and (d) of the Act, compliance with the annual emission limitation 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).
- B. Pursuant to Sections 39.5(7)(b) and (d) of the Act, emissions shall be calculated based on fuel consumption data (as required in 4.3.2(g)(ii)) and emission factors for CO.

The order of preference for the basis of such factors shall be: 1) on-site emission testing, 2) manufacturer's emission data, and 3) emission factors from USEPA's Compilation of Air Pollutant Emission, AP-42, other emission factor compilations, or industry testing.

Recordkeeping

- C. Pursuant to Section 39.5(7)(b) and (d) of the Act, the Permittee shall keep records of monthly and annual CO emissions from the fuel heater (tons/month and tons/year) including emissions from start-ups, with supporting calculations including documentation on the validity of the emission factors used.

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- f. i. **Nitrogen Oxide Requirements (NO_x)**
- A. Pursuant to Construction Permit #98110017, emissions of NO_x from the fuel heater, in total, shall not exceed 1.5 lbs/hour. [T1]
 - B. Pursuant to Construction Permit #98110017, annual NO_x emissions from the fuel heaters shall not exceed 6.4 Tons/yr. [T1]
 - C. Pursuant to Construction Permit #98110017, the fuel heater shall be equipped with Low-NO_x burners designed to emit no more than 0.15 lb NO_x/million Btu heat input (HHV) on an hourly average.. [T1]

ii. **Compliance Method (NO_x Requirements)**

- A. Pursuant to Section 39.5(7)(b) and (d) of the Act, compliance with the annual emission limitation 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).
- B. Pursuant to Sections 39.5(7)(b) and (d) of the Act, emissions shall be calculated based on fuel consumption data (as required in 4.3.2(g)(ii)) and emission factors for NO_x.

The order of preference for the basis of such factors shall be: 1) on-site emission testing, 2) manufacturer's emission data, and 3) emission factors from USEPA's Compilation of Air Pollutant Emission, AP-42, other emission factor compilations, or industry testing.

Recordkeeping

- C. Pursuant to Section 39.5(7)(b) and (d) of the Act, the Permittee shall keep records of monthly and annual NO_x emissions from the fuel heater (tons/month and tons/year) including emissions from start-ups, with supporting calculations including documentation on the validity of the emission factors used.

g. i. **Operational and Production Requirements**

- A. Pursuant to Construction Permit #98110017, the fuel heater shall only be fired with natural gas, as defined in 40 CFR 60.331. [T1]

ii. **Compliance Method (Operational and Production Requirements)**

Recordkeeping

- A. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48(g)(1), the Permittee may elect to record and maintain records of the amount of each fuel combusted during each calendar month.
- B. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain the following records:
 - I. Fuel consumption for the fuel heater, scf/month and scf/year.
 - II. Heat content of the fuel being fired in the fuel heater.

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h. i. Work Practice Requirements

- A. Pursuant to 40 CFR 60.11(d), the Permittee shall at all times, including periods of start-up, shutdown, and malfunction, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment 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 Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source
- B. Pursuant to Construction Permit #98110017, the fuel heater shall be maintained and operated with good combustion practice to reduce emissions of CO, VOM, and PM. [T1]
- C. Pursuant to 40 CFR 60.48c(i), all records required under 40 CFR 60.48c shall be maintained by the Permittee for a period of two years following the date of such record.

ii. Compliance Method (Work Practice Requirements)

Monitoring

- A. Pursuant to Section 39.5(7)(b) and (d) of the Act, the Permittee shall conduct inspections of the fuel heater annually for the purpose of verifying that measures for controlling emissions from the associated equipment are in place and being properly implemented.

Recordkeeping

- B. Pursuant to Construction Permit #98110017, the Permittee shall keep inspection, maintenance, and repair logs with dates and nature of such activities for the fuel heater. [T1]
- C. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall keep records of each inspection of the fuel heater performed along with a maintenance and repair log. These records shall include, at a minimum the following:
 - I. Date and time inspections were performed;
 - II. Name(s) of inspection personnel;
 - III. Identification of equipment being inspected;
 - IV. Findings of the inspections;
 - V. Operation and maintenance procedures; and
 - VI. A description of all maintenance and repair activities performed including if the activity resulted in a modification or reconstruction of the piece of equipment.

3. Non-Applicability Determinations

- a. The fuel heater is not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for Major Sources: Industrial, Commercial, and Institutional Boilers

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and Process Heaters, 40 CFR Part 63 Subpart DDDDD, because the fuel heater is not located at and is not a part of a major source of HAPs as defined in 40 CFR 63.7575.

- b. The fuel heater is not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for Industrial, Commercial, and Institutional boilers Area Sources, 40 CFR Part 63 Subpart JJJJJJ, because the fuel heater is not a boiler as defined in 40 CFR 63.11237.
- c. The fuel heater is not subject to 35 IAC 212.321 or 212.322 because the fuel heater is not a process emission unit (as defined by 211.5190) but is a fuel combustion emission unit (as defined by 211.2470).
- d. The fuel heater is not subject to 35 IAC 212 Subpart E because the fuel heater only combusts gaseous fuels.
- e.
 - i. The fuel heater is not subject to 35 IAC 214 Subpart B because the fuel heater only combusts gaseous fuels.
 - ii. The fuel heater is not subject to 35 IAC 214 Subpart C because the fuel heater only combusts gaseous fuels.
 - iii. The fuel heater is not subject to 35 IAC 214 Subpart D because the fuel heater only combusts gaseous fuels.
 - iv. The fuel heater is not subject to 35 IAC 214.301 because the fuel heater is not a process emission sources as defined by 35 IAC 211.5185. The fuel heater is a fuel combustion emission units as defined by 35 IAC 211.2470.
- f. The fuel heater is not subject to 35 IAC 215.301 because, pursuant to 35 IAC 215.303, the provisions of 35 IAC 215.301 and 215.302 shall not apply to fuel combustion emission sources. The fuel heater is a fuel combustion emission unit as defined by 35 IAC 211.2470.
- g.
 - i. The fuel heater is not subject to 35 IAC 217.141 because the fuel heater is a "New Emission Sources" (i.e., built after April 14, 1972) as defined by 35 IAC 201.102.
 - ii. The fuel heater is not subject to 35 IAC 217 Subpart D because, and by extension 35 IAC 217 Subpart E, or Subpart F, because the fuel heater is not located in the Township of Oswego in Kendall County, pursuant to 35 IAC 217.150(a)(1)(A).
 - iii. The fuel heater is not subject to 35 IAC 217.454 because the fuel heater does not have a maximum design heat input greater than 250 MMBtu/hr.
- h. The fuel heater is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM, SO₂, CO, NO_x, and VOM because the fuel heater does not use an add-on control device to achieve compliance with an emission limitation or standard.

Note: For purposes of CAM, Low NO_x burners are a passive control measure that is not considered a control device because it acts to prevent the pollutants from forming.

- i. The fuel heater is not subject to the Acid Rain Program, 40 CFR 72, because pursuant to 40 CFR 72.6(b)(8) the fuel heater is a non-utility unit. Pursuant to 40 CFR 72.2, "utility unit" is defined as a unit owned or operated by a utility that serves a generator in any State that produces electricity for sale.

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4. Other Requirements

As of the date of issuance of this permit, there are no other requirements that need to be included in this Condition.

5. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

a. Prompt Reporting

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:
 - I. Requirements in Conditions 4.3.2(a)(i), 4.3.2(b)(i), 4.3.2(c)(i), 4.3.2(d)(i), 4.3.2(e)(i), 4.3.2(f)(i), 4.3.2(g)(i), and 4.3.2(h)(i).
- B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- iii. The deviation reports shall contain at a minimum the following information:
 - A. Date and time of the deviation.
 - B. Emission unit(s) and/or operation involved.
 - C. The duration of the event.
 - D. Probable cause of the deviation.
 - E. Corrective actions or preventative measures taken.

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4.4 Cooling Towers

1. Emission Units and Operations

<i>Emission Units</i>	<i>Pollutants Being Regulated</i>	<i>Original Construction Date</i>	<i>Modification/ Reconstruction Date</i>	<i>Air Pollution Control Devices or Measures</i>	<i>Monitoring Devices</i>
T1-T18 Cooling Tower Cells	PM	1999	N/A	Drift Eliminators	None

2. Applicable Requirements

For the emission units in Condition 4.4.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

a. i. Opacity Requirements

A. Pursuant to 35 IAC 212.123(a), the Permittee shall not 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 35 IAC 212.122, except as provided by 35 IAC 212.123(b) and 35 IAC 212.124 (a) and (b).

ii. Compliance Method (Opacity Requirements)

Monitoring

A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, at a minimum, the Permittee shall perform observations for opacity on each emission unit listed in Condition 4.4.1 in accordance with Method 22 for visible emissions at least once per calendar year. If visible emissions are observed, the Permittee shall take corrective action within 24 hours of such observation. Corrective action may include, but is not limited to, shutdown of the emission unit, maintenance and repair, and/or adjustment of the equipment. If corrective action was taken, the Permittee shall perform a follow up observation for visible emissions in accordance with Method 22. If visible emissions continue, then measurements of opacity in accordance with Method 9 shall be conducted within one week.

Recordkeeping

B. Pursuant to Sections 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records for each observation for opacity conducted. These records shall include, at a minimum: date and time the observation was performed, name(s) of observing personnel, identification of which equipment was observed, whether or not the equipment was running properly, the findings of the observation including the presence of any visible emissions, and a description of any corrective action taken including if the corrective action took place within 48 hours of the observation.

b. i. Particulate Matter Requirements (PM)

A. The Permittee shall comply with the requirements of Condition 7.2 for new process emission units (i.e., 35 IAC 212.321).

I. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain a record of the maximum allowable emission rate calculated for 35 IAC 212.321, with supporting calculations.

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Note: In this case the "Process weight" has been determined to be the weight of the process water for the cooling towers.

- B. Pursuant to Construction Permit #98110017, emissions of PM from the cooling towers, in total, shall not exceed 30.2 tons/year. [T1]
- ii. Compliance Method (PM Requirements)

- A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, compliance with the emission limits shall be based on the recordkeeping requirements in Condition 4.4.2(b)(ii)(C) and the emission calculation listed below, or using the Water9 software:

Where:

Drift Loss Factor is 0.001% of circulating water flow pursuant to Construction Permit #98110017. [T1]

Solids content of circulation water ppm by weight is not more than 5,750 ppm (composite daily sample) pursuant to Construction Permit #98110017. [T1]

$$\text{Hourly emissions } \left(\frac{\text{lb}}{\text{hr}}\right) = \frac{\text{Drift Loss Factor} * \text{Circulating Water Rate} \left(\frac{\text{gal}}{\text{min}}\right) * 60 \left(\frac{\text{min}}{\text{hr}}\right) * 8.34 \left(\frac{\text{lb}}{\text{gal}}\right) * \text{dissolved solids}}{1,000,000}$$

- B. Pursuant to Sections 39.5(7)(b) and (d) of the Act, compliance with annual limits in Condition 4.4.2(b)(i)(B) 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).

Recordkeeping

- C. Pursuant to Sections 39.5(7)(b) and (e) of the Act, the Permittee shall keep the following records for the affected cooling towers:
- I. A file containing the design specifications for each cooling tower, including maximum design drift loss (percent) and water re-circulation capacity (gallons per minute).
- II. A file containing representative data for the following:
1. Cooling water drift rate (gallons/hour) based on normal operation of the cooling towers, with supporting documentation.
 2. Total dissolved solids (TDS) content of the cooling water, discharged from the cooling towers based on representative sampling and analysis of the discharge water.
- III. The following operating records for the affected cooling towers:
1. Records for operating hours of the cooling towers (e.g., a log for number of cooling towers operating each hour or the start and stop times for each cooling tower).
 2. Cumulative records for the operating hours of each cooling towers (hours/week and total hours).

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- D. Pursuant to Construction Permit #98110017, the Permittee shall maintain records for the emission of particulate matter from the cooling towers (ton/month and ton/year), with supporting calculations. [T1]

c. i. Operational and Production Requirements

- A. Pursuant to Construction Permit #98110017: [T1]
- I. The cooling towers shall each be equipped, operated, and maintained with drift eliminators designed to limit the loss of water droplets from the cooling tower to not more than 0.001% of the circulating water flow.
- II. Good operating practices shall be followed for the cooling tower to maintain the level of dissolved solids in the cooling tower blowdown to not more than 5,750 mg/L, composite daily sample.
- B. Pursuant to 40 CFR 60.11(d), the Permittee shall at all times, including periods of start-up, shutdown, and malfunction, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment 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 Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source

ii. Compliance Method (Operational and Production Requirements)

Monitoring

- A. Pursuant to Section 39.5(7)(b) and (d) of the Act, the Permittee shall sample the cooling tower water for dissolved solids on a monthly basis to ensure compliance with Condition 4.4.2(c)(i)(A)(II).

Recordkeeping

- B. Pursuant to Construction Permit #98110017, the Permittee shall keep inspection, maintenance, and repair logs with dates and nature of such activities for the cooling tower drift eliminators. [T1]
- C. Pursuant to Construction Permit #98110017, the Permittee shall keep the following records for the cooling towers: [T1]
- I. A file containing the manufacturer's specification for drift loss from the cooling towers with supporting documentation.
- II. Records for the solids contents of the cooling tower water, on a daily composite basis, as determined by sampling and analysis.
- III. Records for the actions used to routinely verify the solids contents of the cooling tower such as grab sampling and analysis, NPDES sampling and analysis, conductivity measurements, etc., including:
1. A written description of the procedures, with explanation of how they act to address compliance.
 2. Records for implementation of the procedure, including measured value(s) of relevant parameter(s).

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- IV. Records for the amount of water circulated in the cooling towers, gallons/month.
- D. Pursuant to Section 39.5(7)(e) of the Act, the Permittee shall maintain records of the cooling water drift rate, gallons/hour, based on representative operation of the affected cooling tower.
- E. Pursuant to Section 39.5(7)(e) of the Act, the Permittee shall maintain records of the actual affected cooling tower operating hours (hours/month).

3. Non-Applicability Determinations

- a. The cooling towers are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for Industrial Cooling Towers, 40 CFR Part 63 Subpart Q, because the Cooling Towers are **not** operated with chromium-based water treatment chemicals.
- b. The cooling towers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the cooling towers use a passive control measure, such as a combustion or other process design feature (i.e., drift eliminator) or characteristic, that is not considered a control device because it acts to prevent the pollutants from forming.

4. Other Requirements

As of the date of issuance of this permit, there are no other requirements that need to be included in this Condition.

5. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

a. Prompt Reporting

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:
 - I. Requirements in Conditions 4.4.2(a)(i), 4.4.2(b)(i), and 4.4.2(c)(i).
- B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- iii. The deviation reports shall contain at a minimum the following information:
 - A. Date and time of the deviation.
 - B. Emission unit(s) and/or operation involved.
 - C. The duration of the event.
 - D. Probable cause of the deviation.
 - E. Corrective actions or preventative measures taken.

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Section 5 - Additional Requirements for the Natural Gas-Fired Turbines and Heat Recovery Steam Generators

1. Construction Permits

a. Construction Permit #98110017 [T1]

i. Emission Units and Operations

Section	Emission Units	Pollutants Being Regulated
4.1	Natural Gas-Fired Turbines (CT) (Subject to NSPS - 40 CFR Subpart GG)	PM, SO ₂ , VOM, CO, and NO _x
4.2	Heat recovery Steam Generators (HRSG) (Subject to NSPS - 40 CFR Subpart Da)	PM, SO ₂ , VOM, CO, and NO _x

ii. Applicable Requirements

In addition to the requirements in Section 4 of this permit for the emission units in Condition 5.1 (a)(i) above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

A. Pursuant to Construction Permit #98110017, emissions of NO_x from each CT/HRSG shall not exceed 4.5 ppmvd at 15% O₂ on an hourly average, except during start-up, malfunction, shutdown, or periodic tuning as addressed by Conditions, 5.1(a)(ii)(E), 5.2(d)(i)(E), and 7.4(a)(ii). [T1]

B. Pursuant to Construction Permit #98110017, the emissions from the CT/HRSGs shall not exceed the following limits: [T1]

I. Emission limits for each CT/HRSG without duct burners operating:

Pollutant	(Lbs/MMBtu)	(Lbs/Hour)
NO _x	-	36.0
CO	0.0511	93.8
PM/PM ₁₀	0.0180	36.7
VOM	0.0094	17.3
SO ₂	0.006	13.4

1. The (Lbs/MMBtu) limits above apply in the maximum load range of the CT/HRSG and not during start-up, shutdown or other operation below the maximum load range.

2. The (Lbs/Hour) NO_x limit does not apply during start-up, shutdown, periodic tuning or malfunction (see Conditions, 5.1(a)(ii)(A) and (E), 5.2(d)(i)(E), and 7.4(a)(ii)).

3. The (Lbs/Hour) CO and VOM limits apply when turbines are operating above 50 percent load and not during start-up, shutdown or operation below 50 percent load, when the CO and VOM limits are 2,000 and 35 pounds/hour, respectively.

4. The (Lbs/Hour) PM/PM₁₀ and SO₂ limit apply at all times.

II. Emission limits for each CT/HRSG with duct burners operating:

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Pollutant	(Lbs/MMBtu)	(Lbs/Hour)
NO _x	-	41.7
CO	0.0626	136.7
PM/PM ₁₀	0.0183	43.9
VOM	0.0162	35.3
SO ₂	0.006	15.6

1. The (Lbs/MMBtu) limits above apply to the maximum load range of the CT/HRSG and not during start-up, shutdown or other operation below the maximum load range.
2. The (Lbs/Hour) NO_x limit does not apply during start-up, shutdown, periodic tuning or malfunction (see Conditions, 5.1(a)(ii)(A) and (E), 5.2(d)(i)(E), and 7.4(a)(ii)).
3. All other (Lbs/Hour) limits apply at all times.

III. Annual emission limits for the CT/HRSGs:

Pollutant	Tons/Year Each	Tons/Year Total
NO _x	157.7	630.7
CO	598.8	2,395.2
PM/PM ₁₀	192.3	769.1
VOM	154.6	618.4
SO ₂	68.3	273.3

- C. Pursuant to Construction Permit #98110017, on a daily basis during the non-ozone season (January through April and October through December), VOM emissions from the CT/HRSGs shall not exceed 3,725 pounds, total. [T1]

On a daily basis, VOM emissions from the CTG/HRSGs during the ozone season (May through September) shall not exceed 3000 pounds, total.

- D. Pursuant to Construction Permit #98110017, at all times, each turbine shall be operated in a manner consistent with good air pollution control practice to minimize emissions of NOX including:
- I. Review of operating parameters of the CT/HRSG's during malfunction or breakdown as necessary to make adjustments to minimize NOX emissions.
 - II. Review of the operating parameters of the CT/HRSG's during malfunction or breakdown of the duct burners or steam augmentation as necessary to make adjustments to minimize NOX emissions.
- E. Pursuant to Construction Permit #98110017, upon malfunction of the SCR system that will result in NOX emissions in excess of Conditions 5.1(a)(ii)(A).
- I. The Permittee shall as soon as practicable repair the affected system or remove the turbine from service so that excess emissions cease.
 - II. The Permittee shall begin shutdown of the turbine within 90 minutes, unless the malfunction is expected to be repaired in 120 minutes or such shutdown would threaten the stability of the regional electrical power system. In such case, shutdown of the turbine shall be undertaken when it is apparent that repair will not be accomplished within 120 minutes or shutdown would not endanger the regional power

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system. In no case shall shutdown of a turbine be delayed solely for the economic benefit of the Permittee.

iii. Compliance Method

Monitoring

- A. I. Pursuant to Construction Permit #98110017, the Permittee shall install, operate, and maintain a Continuous Emissions Monitoring (CEM) system to measure emissions of NO_x from each CT/HRSG to demonstrate compliance with the limitations of this permit. [T1]
- II. Pursuant to Construction Permit #98110017, the procedures under 40 CFR 60.13 and 75.12 shall be followed for the installation, evaluation, and operation these CEM systems. Compliance with the quality assurance and quality control requirements in 40 CFR 75, Appendix B, may be used as allowed in the 40 CFR 60.334. [T1]
- III. Pursuant to Construction Permit #98110017, these CEMS shall be operational and collecting data in accordance with the provisions of the Acid Rain Program. [T1]

Recordkeeping

- B. Pursuant to Construction Permit #98110017, the Permittee shall keep the following records with regards to emissions: [T1]
 - I. 1. NO_x emissions from each CT/HRSG recorded hourly, quarterly, and annual (in lbs/MMBtu) by combining the NO_x concentration (in ppm) and diluent concentration (in percent O₂ or CO₂) measurements according to the procedures in 40 CFR 75 Appendix F.
 - 2. NO_x emissions from each CT/HRSG recorded during periodic tuning and each start-up, malfunction or breakdown and shutdown during operation with duct burners or steam augmentation (in lbs/event).
- II. Pursuant to Construction Permit #98110017, and Section 39.5(7)(b) and (e) of the Act, monthly emissions of NO_x, CO, SO₂, VOM, and PM from each CT/HRSG (tons/month). NO_x emissions from each CT/HRSG shall be based on data from the CEMS. All other emissions shall be calculated based on fuel consumption data and site-specific emission factors developed from the most recent emission test data or manufacturer's published emission rates. [T1]
- C. Pursuant to Section 39.5(7)(b) and (d) of the Act, the Permittee shall keep records of annual emissions of NO_x, CO, SO₂, VOM, and PM from each CT/HRSG (tons/year) including emissions from start-ups, with supporting calculations including documentation on the validity of the emission factors used.
- D. Pursuant to Construction Permit #98110017, the Permittee shall maintain following records for each CT/HRSG:
 - I. The time and date of malfunction or breakdown of the CT/HRSG, and confirmation that standard practices were followed.

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- II. The time and date of malfunction or breakdown of the duct burners or power augmentation in the CT/HRSG, and confirmation that standard practices were followed.
- III. Each incident when operation of the CT/HRSG or the duct burners for the HRSG continued during malfunction or breakdown with excess emissions, including the following information:
 - 1. Date and duration of malfunction or breakdown;
 - 2. Description of the malfunction or breakdown;
 - 3. The reason continued operation of the unit was necessary, including supporting documentation; and
 - 4. The corrective actions used to reduce the quantity of emissions and the duration of the incident.

b. Construction Permit #13090037 [T1]

i. Emission Units and Operations

<i>Section</i>	<i>Emission Units</i>	<i>Pollutants Being Regulated</i>
4.1	Natural Gas-Fired Turbines (CT) (Subject to NSPS - 40 CFR Subpart GG)	SO2
4.2	Heat recovery Steam Generators (HRSG) (Subject to NSPS - 40 CFR Subpart Da)	SO2

ii. Applicable Requirements

In addition to the requirements in Section 4 of this permit for the emission units in Condition 5.1(b)(i) above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

- A. Pursuant to Construction Permit #13090037, the total sulfur content of the natural gas fired in the affected units shall not exceed 460 mg/scm (20 grains/100 standard cubic feet). [T1]

iii. Compliance Method

Recordkeeping

- A. Pursuant to Construction Permit #13090037, the Permittee shall keep records of the relevant portion(s) of the contracts for the fuel fired in the affected units or other relevant information for this fuel to confirm compliance with Condition 5.1(b)(ii)(A). [T1]

c. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

i. Prompt Reporting

- A. I. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different

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period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:

Requirements in Conditions 5.1(a)(ii) and 5.1(b)(ii).

- II. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- B. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Reports required by Condition 3.5(b).
- C. The deviation reports shall contain at a minimum the following information:
 - I. Date and time of the deviation.
 - II. Emission unit(s) and/or operation involved.
 - III. The duration of the event.
 - IV. Probable cause of the deviation.
 - V. Corrective actions or preventative measures taken.
- ii. Pursuant to Construction Permit #98110017: [T1]
 - A. The Permittee shall submit semi-annual operating reports and emission data that include the following information for each CT/HRSG:
 - I. Number of start-ups, average duration of start-up and total hours of operation;
 - II. Number of duct burner events and duration of such operation;
 - III. Number of power augmentation events and duration of such operation;
 - IV. Number of malfunction events and duration of such operation; and
 - V. Number of periodic tuning events and duration of such operation.
 - B. In the event continued operation of a CT/HRSG with excess NOX emissions during a malfunction of the SCR system is expected to occur for more than 90 minutes, the Permittee shall promptly notify the Illinois EPA's regional office of the malfunction and the reason for continued operation.

2. Other Applicable Requirements

a. i. Emission Units and Operations

<i>Section</i>	<i>Emission Units</i>	<i>Pollutants Being Regulated</i>
4.1	Natural Gas-Fired Turbines (CT) (Subject to NSPS - 40 CFR Subpart GG)	Opacity (PM) and NO _x
4.2	Heat recovery Steam Generators (HRSG) (Subject to NSPS - 40 CFR Subpart Da)	Opacity (PM) and NO _x

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ii. Applicable Requirements

In addition to the requirements in Section 4 of this permit for the emission units in Condition 5.2(a)(i) above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

b. i. Opacity Requirements

A. When the duct burner in an affected HRSG is not being fired, the following requirement applies to the corresponding turbine:

Pursuant to 35 IAC 212.123(a), the Permittee shall not 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 35 IAC 212.122, except as provided in 35 IAC 212.123(b) and 212.124.

B. When the duct burner in an affected HRSG is being fired, the following requirement applies to the HRSG and corresponding turbine:

Pursuant to 35 IAC 212.122(a), the Permittee shall not cause or allow the emission of smoke or other particulate matter into the atmosphere from any fuel combustion emission unit for which construction or modification commenced on or after April 14, 1972, with actual heat input greater than 73.2 MW (250 MMBtu/hr), having an opacity greater than 20 percent, except as provided in 35 IAC 212.122(b) and 212.124.

ii. Compliance Method (Opacity Requirements)

Monitoring

A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, the Permittee shall perform observations for opacity on each emission unit listed in Conditions 4.1.1 and 4.2.1 in accordance with Method 22 for visible emissions at least once per calendar year. If visible emissions are observed, the Permittee shall take corrective action, if necessary, within 24 hours of such observation. Corrective action may include, but is not limited to, shutdown of the emission unit, maintenance and repair, and/or adjustment of the equipment. If corrective action was taken, the Permittee shall perform a follow up observation for visible emissions in accordance with Method 22. If visible emissions continue, then visual determination of opacity in accordance with Method 9 shall be conducted within one week.

Recordkeeping

B. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records for each observation for opacity conducted. These records shall include: date and time the observation was performed, name(s) of observing personnel, identification of which equipment was observed, whether or not the equipment was running properly, the findings of the observation including the presence of any visible emissions, and a description of any corrective action taken including if the corrective action took place within 24 hours of the observation.

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c. i. **NOx Compliance Method (Additional Requirement)**

Compliance Method (NO_x Requirements)

Monitoring

- A. Pursuant to 35 IAC 217.710(a), the Permittee shall calibrate, maintain and operate continuous emissions monitoring systems (CEMS) for NO_x that meet the requirements of 40 CFR 75, subpart B.

Note: This is for each turbine and corresponding HRSG (for a total of four NO_x CEMS)

d. i. **Work Practice Requirements**

- A. I. Pursuant to 40 CFR 60.11(d), the Permittee shall at all times, including periods of start-up, shutdown, and malfunction, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment 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 Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source
- II. Pursuant to Construction Permit #98110017, each CT/HRSG shall be maintained and operated with good combustion practice to reduce emissions of CO, VOM, and PM. [T1]
- B. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall operate and maintain the CT/HRSGs in accordance with written operating procedures that shall include the following measures:
- I. Review of operating parameters of the CT/HRSG during start-up or shutdown as necessary for the proper operation of the CT/HRSG with appropriate adjustments to reduce emissions.
- II. Implementation of inspection and repair procedures for a CT/HRSG prior to attempting start-up following repeated trips.
- III. Unless specified on a more frequent basis by manufacturer's written instructions, an inspection of emissions-related components shall be completed annually. Inspections shall be conducted in accordance with manufacturer's written instructions or other written procedures developed and maintained by the Permittee.
- IV. Repair and routine replacement of emissions-related components.
- C. Pursuant to Section 39.5(7)(a) of the Act, in lieu of the requirements in Conditions 5.2(d)(i)(B)(I)-(IV), the written operating procedures addressed in Condition 5.2(d)(i)(B) may incorporate the manufacturer's written instruction for operation and maintenance of the CT/HRSG and associated control systems. The Permittee shall review these procedures at least every two years and shall revise or enhance them if necessary to be consistent with good air pollution control practice based on the actual operating experience and performance of the source.

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- D. Pursuant to Construction Permit #98110017, each turbine shall be maintained and operated with good combustion practice to reduce emissions of CO, VOM, and PM. [T1]
- E. Pursuant to Construction Permit #98110017, at all times, each CT/HRSG shall be operated in a manner consistent with good air pollution control practice to minimize emissions of NO_x including: [T1]
 - I. Operation in accordance with the manufacturer's written instructions or other written instructions developed by the Permittee.
 - II. Operation of the SCR system as soon as and as long as the unit operating conditions are amenable to its effective use, except when precluded during periodic tuning.

Note: Periodic tuning is a separate operating mode of the affected CT/HRSG during which emissions performance is evaluated and adjustments are made if necessary to established settings for various operating parameters to improve performance of units. Periodic tuning is a planned activity that is supervised by expert staff of the Permittee or outside personnel, which is generally conducted when units are not being relied upon for power output.
 - III. Review of operating parameters of the CT/HRSG during shutdown as necessary to make adjustments to minimize NO_x emissions.
 - IV. Review of the operating parameters of the CT/HRSG during shutdown of the duct burners or steam augmentation as necessary to make adjustments to minimize NO_x emissions.

ii. Compliance Method (Work Practice Requirements)

Monitoring

- A. Pursuant to Section 39.5(7)(b) and (d) of the Act, the Permittee shall conduct inspections of the CT/HRSG annually for the purpose of verifying that measures for controlling emissions from the associated equipment are in place and being properly implemented.

Recordkeeping

- B. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall keep records of each inspection of the turbines performed along with a maintenance and repair log. These records shall include the following:
 - I. Date and time inspections were performed;
 - II. Name(s) of inspection personnel;
 - III. Identification of equipment being inspected;
 - IV. Findings of the inspections; and
 - V. A description of all maintenance and repair activities performed including if the activity resulted in a modification or reconstruction of the piece of equipment.

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- C. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of the following items:
 - I. Records documenting the periodic review of operating procedures as required by Conditions 5.2(d)(1)(B) and (C).
 - II. Good operating practices for each CT/HRSG.
 - III. Manufacturer/vendor or site developed operating and maintenance procedures.
 - IV. Operating and maintenance logs and addition or replacement of a catalyst layer.
- D. Pursuant to Construction Permit #98110017, the Permittee shall keep inspection, maintenance, and repair logs with dates and nature of such activities for the following: [T1]
 - 1. Each CT/HRSG, including duct burners.
 - 2. Each SCR system.
 - 3. The SCR reagent storage system.
- E. Pursuant to Construction Permit #98110017, the Permittee shall maintain following records for each CT/HRSG related to shutdown: [T1]
 - I. The time and date of shutdown of the CT/HRSG, and confirmation that standard practices were followed.
 - II. The time and date of shutdown of the duct burners or power augmentation in the CT/HRSG, and confirmation that standard practices were followed.

e. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

i. Prompt Reporting

- A. I. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:

Requirements in Conditions 5.2(b), 5.2(c), and 5.2(d).
- II. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- B. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Reports required by Condition 3.5(b).
- C. The deviation reports shall contain the following information:
 - I. Date and time of the deviation.
 - II. Emission unit(s) and/or operation involved.

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Section 5 - Additional requirements for the Natural Gas-Fired Turbines and Heat Recovery Steam Generators

- III. The duration of the deviation.
- IV. Probable cause of the deviation, if known.
- V. Any corrective actions or preventative measures taken.

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Section 6 - Insignificant Activities Requirements

1. Insignificant Activities Subject to Specific Regulations

Pursuant to 35 IAC 201.210 and 201.211, the following activities at the source constitute insignificant activities. Pursuant to Sections 9.1(d) and 39.5(6)(a) of the Act, the insignificant activities are subject to specific standards promulgated pursuant to Sections 111, 112, 165, or 173 of the Clean Air Act. The Permittee shall comply with the following applicable requirements:

<i>Insignificant Activity</i>	<i>Number of Units</i>	<i>Insignificant Activity Category</i>
Gas Turbines and Engines between 112 KW and 1,118 KW (150 and 1,500 HP) that are emergency or standby units. <ul style="list-style-type: none"> • Two 765 HP Backup Diesel Generators (BK-1 and BK-2) built April 2001. • One 240 HP Diesel Fire Pump (DFP-1) built April 2001. 	3	35 IAC 201.210(a)(16)

a. Applicable Requirements

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 in addition to the applicable requirements in Condition 6.4:

i. National Emission Standards for Hazardous Air Pollutants (NESHAP)

A. For the emergency stationary reciprocating internal combustion engines:

Pursuant to...	the Permittee must...
40 CFR 63.6603(a)	Comply with the requirements in Table 2d to 40 CFR Part 63 Subpart ZZZZ and the operating limitations in Table 2b to 40 CFR Part 63 Subpart ZZZZ that apply.
Table 2d to 40 CFR Part 63 Subpart ZZZZ (Item 4(a)-(c))	<ol style="list-style-type: none"> 1. Change oil and filter every 500 hours of operation or annually, whichever comes first; 2. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and; and 3. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
40 CFR 63.6604(b)	Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.
40 CFR 63.6605(a)	Be in compliance with the emission limitations, operating limitations, and other requirements in 40 CFR Part 63 Subpart ZZZZ that apply to the engines at all times.

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Section 6 - Insignificant Activities Requirements

40 CFR 63.6605(b)	At all times the Permittee must operate and maintain any affected engine, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator 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.
40 CFR 63.6625(e)	Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions
40 CFR 63.6625(f)	Install a non-resettable hour meter if one is not already installed.
40 CFR 63.6625(h)	Minimize the engine's time spent at idle during start-up and minimize the engine's start-up time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than start-up in Tables 1a, 2a, 2c, and 2d to this subpart apply.
40 CFR 63.6625(i)	The Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement (as described in 40 CFR 63.6625(i)) in Tables 2c and 2d to 40 CFR Part 63 Subpart ZZZZ.
40 CFR 63.6640(a)	Demonstrate continuous compliance with each requirement in Table 2d to 40 CFR Part 63 Subpart ZZZZ that apply according to methods specified in Table 6 to this subpart.
Table 6 to 40 CFR Part 63 Subpart ZZZZ (Item 9)	<ul style="list-style-type: none"> i. Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
40 CFR 63.6640(e)	Report each instance in which you did not meet the requirements in Table 8 to 40 CFR Part 63 Subpart ZZZZ that apply.
40 CFR 63.6640(f)	Operate the emergency stationary RICE according to the requirements in paragraphs 40 CFR 63.6640(f)(1), (f)(2)(i), and (f)(4). Submit any notifications and/or reports required under 40 CFR 63.6645 and 63.6650
40 CFR 63.6645 and 63.6650	Keep any records required as per 40 CFR 63.6655 and the other provisions shown in 40 CFR Part 63 Subpart ZZZZ. These include the records the hours of operation of the engines, required in 40 CFR 63.6655(f), that is recorded through a non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the

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	operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.
40 CFR 63.6655(d)	Keep the records required in Table 6 of 40 CFR Part 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies. Comply with the applicable General Provisions in 40 CFR 63.1 through 63.15 in Table 8 to 40 CFR Part 63 Subpart ZZZZ that apply.
40 CFR 63.6655(e)	Keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the engines were operated and maintained according to the Permittees own maintenance plan.
40 CFR 63.6655(f)	Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.
40 CFR 63.6660	Records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). As specified in 40 CFR 63.10(b)(1), Keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

2. Insignificant Activities in 35 IAC 201.210(a)

In addition to any insignificant activities identified in Condition 6.1, the following additional activities at the source constitute insignificant activities pursuant to 35 IAC 201.210 and 201.211:

<i>Insignificant Activity</i>	<i>Number of Units</i>	<i>Insignificant Activity Category</i>
Emission units with emissions that never exceed 0.1 lbs/hr of any regulated air pollutant in the absence of air pollution control equipment and that do not emit any air pollutant listed as hazardous pursuant to Section 112(b) of the Clean Air Act; Emission units with emissions that never exceed 0.44 tons/year of any regulated air pollutant in the absence of air pollution control equipment and that do not emit any air pollutant listed as hazardous pursuant to Section 112(b) of the Clean Air Act; • Ammonia Storage Tank (NH3 Tank)	1	35 IAC 201.210(a)(2) or (a)(3)

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<i>Insignificant Activity</i>	<i>Number of Units</i>	<i>Insignificant Activity Category</i>
Direct combustion units used for comfort heating and fuel combustion emission units as further detailed in 35 IAC 201.210(a)(4). <ul style="list-style-type: none"> • Forty two Natural Gas-Fired Space Heaters, all less than 2.5 MMBtu/hr (SH1 to SH42) • One Tioga heaters, up to 1.2 MMBtu/hr (rental unit) (RH-1) • Four AbsolutAire NG Heaters, 1.75 MMBtu/hr (AAH1-AAH4) 	47	35 IAC 201.210(a)(4)
Storage tanks of gasoline, including gasoline/ethanol blend fuels, with a capacity of less than 2000 gallons. <ul style="list-style-type: none"> • One 1,000-Gallon Gasoline Storage Tank 	1	35 IAC 201.210(a)(10)(B)
Storage tanks of virgin or rerefined distillate oil (including kerosene and diesel fuel), hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils. <ul style="list-style-type: none"> • One 2,000-Gallon Diesel Fuel Storage Tank (TK-1) • One 270-Gallon Diesel Fuel Storage Tank (TK-2) • One 500-Gallon Diesel Fuel Storage Tank (TK-3) • Four 350-Gallon Hydraulic Oil Reservoirs (HO1-HO4) • Four 6,200-Gallon Gas Turbine Lube Oil Reservoirs (GLO1-GLO4) • Four 3,260-Gallon Steam Turbine Lube Oil Reservoirs • One Oil/Water Separator Tank System • One Natural Gas Condensate Tank 	17	35 IAC 201.210(a)(11)

3. Insignificant Activities in 35 IAC 201.210(b)

Pursuant to 35 IAC 201.210, the source has identified insignificant activities as listed in 35 IAC 201.210(b)(1) through (28) as being present at the source. The source is not required to individually list the activities.

4. Applicable Requirements

Insignificant activities in Conditions 6.1 and 6.2 are subject to the following general regulatory limits notwithstanding status as insignificant activities. The Permittee shall comply with the following requirements, as applicable:

- a. Pursuant to 35 IAC 212.123(a), 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 35 IAC 212.122, except as provided in 35 IAC 212.123(b).
- b. Pursuant to 35 IAC 212.321 or 212.322 (see Condition 7.2(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 which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceed the allowable emission rates specified 35 IAC 212.321 or 212.322 and 35 IAC Part 266.
- c. Pursuant to 35 IAC 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2,000 ppm, except as provided in 35 IAC Part 214.

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- d. Pursuant to 35 IAC 215.301, no person shall cause or allow the discharge of more than 8 lbs/hr of organic material into the atmosphere from any emission source, except as provided in 35 IAC 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 IAC 215 Subpart K shall apply only to photochemically reactive material.
- e. Pursuant to 35 IAC 215.122(b), no person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 250 gal, unless such tank is equipped with a permanent submerged loading pipe, submerged fill, or an equivalent device approved by the IEPA according to 35 IAC Part 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). Exception as provided in 35 IAC 215.122(c): If no odor nuisance exists the limitations of 35 IAC 215.122 shall only apply to the loading of volatile organic liquid with a vapor pressure of 2.5 psia or greater at 70°F.

5. Compliance Method

Pursuant to Section 39.5(7)(b) of the Act, the source shall maintain records of the following items for the insignificant activities in Conditions 6.1 and 6.2:

- a. List of all insignificant activities, including insignificant activities added as specified in Condition 6.6, the categories the insignificant activities fall under, and supporting calculations as needed for any insignificant activities listed in 35 IAC 201.210(a)(1) through (3).
- b. Potential to emit emission calculations before any air pollution control device for any insignificant activities listed in 35 IAC 201.210(a)(1) through (3).

6. Notification Requirements for Insignificant Activities

The source shall notify the IEPA accordingly to the addition of insignificant activities:

a. Notification 7 Days in Advance

- i. Pursuant to 35 IAC 201.212(b), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(a)(1) and 201.211 and is not currently identified in Conditions 6.1 or 6.2, a notification to the IEPA Permit Section 7 days in advance of the addition of the insignificant activity is required. Addresses are included in Attachment 3. The notification shall include the following pursuant to 35 IAC 201.211(b):
 - A. A description of the emission unit including the function and expected operating schedule of the unit.
 - B. A description of any air pollution control equipment or control measures associated with the emission unit.
 - C. The emissions of regulated air pollutants in lbs/hr and tons/yr.
 - D. The means by which emissions were determined or estimated.
 - E. The estimated number of such emission units at the source.
 - F. Other information upon which the applicant relies to support treatment of such emission unit as an insignificant activity.
- ii. Pursuant to 35 IAC 201.212(b), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(a)(2) through 201.210(a)(18) and is not currently identified in Conditions 6.1 or 6.2, a notification to the IEPA Permit

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Section 7 days in advance of the addition of the insignificant activity is required. Addresses are included in Attachment 3.

- iii. Pursuant to Sections 39.5(12)(a)(i)(b) and 39.5(12)(b)(iii) of the Act, the permit shield described in Section 39.5(7)(j) of the Act (see Condition 2.7) shall not apply to any addition of an insignificant activity noted above.

b. Notification Required at Renewal

Pursuant to 35 IAC 201.212(a) and 35 IAC 201.146(kkk), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(a) and is currently identified in Conditions 6.1 or 6.2, a notification is not required until the renewal of this permit.

c. Notification Not Required

Pursuant to 35 IAC 201.212(c) and 35 IAC 201.146(kkk), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(b) as described in Condition 6.3, a notification is not required.

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Section 7 - Other Requirements

1. Testing

- a. Pursuant to Section 39.5(7)(a) of the Act, a written test protocol shall be submitted at least sixty (60) days prior to the actual date of testing, unless it is required otherwise in applicable state or federal statutes. The IEPA may at the discretion of the Compliance Section Manager (or designee) accept protocol less than 60 days prior to testing provided it does not interfere with the IEPA's ability to review and comment on the protocol and does not deviate from the applicable state or federal statutes. The protocol shall be submitted to the IEPA, Compliance Section and IEPA, Stack Test Specialist for its review. Addresses are included in Attachment 3. This protocol shall describe the specific procedures for testing, including as a minimum:
- i. The name and identification of the emission unit(s) being tested.
 - ii. Purpose of the test, i.e., permit condition requirement, IEPA or USEPA requesting test.
 - iii. The person(s) who will be performing sampling and analysis and their experience with similar tests.
 - iv. 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 emission unit and any control equipment will be determined.
 - v. The specific determinations of emissions and operation which are intended to be made, including sampling and monitoring locations.
 - vi. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods. Include if emission tests averaging of 35 IAC 283 will be used.
 - vii. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with detailed justification. This shall be included as a waiver of the test procedures. If a waiver has already been obtained by the IEPA or USEPA, then the waiver shall be submitted.
 - viii. Any proposed use of an alternative test method, with detailed justification. This shall be included as a waiver of the test procedures. If a waiver has already been obtained by the IEPA or USEPA, then the waiver shall be submitted.
 - ix. Sampling of materials, QA/QC procedures, inspections, etc.
 - x. Notwithstanding condition 7.1 above, a test plan need not be submitted under the following circumstances:
 - A. Where the Permittee intends to utilize a test plan previously submitted. However, the Permittee must submit a notice containing the following:
 - I. The purpose of the test;
 - II. Date the previously submitted test plan was submitted; and
 - III. A statement that the source is relying on a previously submitted test plan.

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- B. Where the source intends to use a standard test method or procedure. However, the Permittee must submit a notice containing the following:
 - I. The purpose of the test; and
 - II. The standard test method or procedure to be used.
- b. The IEPA, Compliance Section shall be notified prior to these tests to enable the IEPA to observe these tests pursuant to Section 39.5(7)(a) of the Act as follows:
 - i. Notification of the expected date of testing shall be submitted in writing a minimum of thirty (30) days prior to the expected test date, unless it is required otherwise in applicable state or federal statutes.
 - ii. Notification of the actual date and expected time of testing shall be submitted in writing a minimum of five (5) working days prior to the actual date of the test. The IEPA may at its discretion of the Compliance Section Manager (or designee) accept notifications with shorter advance notice provided such notifications will not interfere with the IEPA's ability to observe testing.
- c. Copies of the Final Report(s) for these tests shall be submitted to the IEPA, Compliance Section within fourteen (14) days after the test results are compiled and finalized but no later than ninety (90) days after completion of the test, unless it is required otherwise in applicable state or federal statutes or the IEPA may at the discretion of the Compliance Section Manager (or designee) agree upon an alternative date upon in advance pursuant to Section 39.5(7)(a) of the Act. The Final Report shall include as a minimum:
 - i. General information including emission unit(s) tested.
 - ii. A summary of results.
 - iii. Discussion of conditions during each test run (malfunction/breakdown, start-up/shutdown, abnormal processing, etc.).
 - iv. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.
 - v. Detailed description of test conditions, including:
 - A. Process information, i.e., mode(s) of operation, process rate, e.g. fuel or raw material consumption.
 - B. Control equipment information, i.e., equipment condition and operating parameters during testing.
 - C. A discussion of any preparatory actions taken, i.e., inspections, maintenance and repair.
 - vi. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
 - vii. An explanation of any discrepancies among individual tests or anomalous data.
 - viii. Results of the sampling of materials, QA/QC procedures, inspections, etc.
 - ix. Discussion of whether protocol was followed and description of any changes to the protocol if any occurred.

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- x. Demonstration of compliance showing whether test results are in compliance with applicable state or federal statutes.
- d. Copies of all test reports and other test related documentation shall be kept on site as required by Condition 2.5(b) pursuant to Section 39.5(7)(e)(ii) of the Act.

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2. PM Process Weight Rate Requirements

a. New Process Emission Units - 35 IAC 212.321

New Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972. [35 IAC 212.321]

- i. No person shall cause or allow the emission of PM into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of PM 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 35 IAC 212.321(c). See Condition 7.2(a)(iii) below. [35 IAC 212.321(a)]
- ii. Interpolated and extrapolated values of the data in 35 IAC 212.321(c) shall be determined by using the equation: [35 IAC 212.321(b)]

$$E = A(P)^B$$

Where:

P = Process weight rate (T/hr)
E = Allowable emission rate (lbs/hr)

A. Process weight rates of less than 450 T/hr:

A = 2.54
B = 0.53

B. Process weight rates greater than or equal to 450 T/hr:

A = 24.8
B = 0.16

iii. Limits for New Process Emission Units: [35 IAC 212.321(c)]

<u>P</u> (T/hr)	<u>E</u> (lbs/hr)	<u>P</u> (T/hr)	<u>E</u> (lbs/hr)
0.05	0.55	25.00	14.00
0.10	0.77	30.00	15.60
0.20	1.10	35.00	17.00
0.30	1.35	40.00	18.20
0.40	1.58	45.00	19.20
0.50	1.75	50.00	20.50
0.75	2.40	100.00	29.50
1.00	2.60	150.00	37.00
2.00	3.70	200.00	43.00
3.00	4.60	250.00	48.50
4.00	5.35	300.00	53.00
5.00	6.00	350.00	58.00
10.00	8.70	400.00	62.00
15.00	10.80	450.00	66.00
20.00	12.50	500.00	67.00

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3. 40 CFR 63 Subpart A Requirements (NESHAP)

a. 40 CFR 63 Subpart A and ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Pursuant to 40 CFR 63 Subpart A and ZZZZ, the Permittee shall comply with the following applicable General Provisions as indicated:

General provisions citation	Subject of citation	Applies to subpart	Explanation
40 CFR 40 CFR 63.1	General applicability of the General Provisions	Yes.	
40 CFR 40 CFR 63.2	Definitions	Yes	Additional terms defined in 40 CFR 63.6675.
40 CFR 63.3	Units and abbreviations	Yes.	
40 CFR 63.4	Prohibited activities and circumvention	Yes.	
40 CFR 63.5	Construction and reconstruction	Yes.	
40 CFR 63.6(a)	Applicability	Yes.	
40 CFR 63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
40 CFR 63.6(b)(5)	Notification	Yes.	
40 CFR 63.6(b)(6)	[Reserved]		
40 CFR 63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
40 CFR 63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
40 CFR 63.6(c)(3)-(4)	[Reserved]		
40 CFR 63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
40 CFR 63.6(d)	[Reserved]		
40 CFR 63.6(e)	Operation and maintenance	No.	
40 CFR 63.6(f)(1)	Applicability of standards	No.	
40 CFR 63.6(f)(2)	Methods for determining compliance	Yes.	
40 CFR 63.6(f)(3)	Finding of compliance	Yes.	
40 CFR 63.6(g)(1)-(3)	Use of alternate standard	Yes.	
40 CFR 63.6(h)	Opacity and visible emission	No	Subpart ZZZZ does not contain

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Section 7 - Other Requirements
7.3 - 40 CFR 63 Subpart A
Requirements (NESHAP)

	standards		opacity or visible emission standards.
40 CFR 63.6(i)	Compliance extension procedures and criteria	Yes.	
40 CFR 63.6(j)	Presidential compliance exemption	Yes.	
40 CFR 63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at 40 CFR 40 CFR 63.6610, 63.6611, and 63.6612.
40 CFR 63.7(a)(3)	CAA Section 114 authority	Yes.	
40 CFR 63.7(b)(1)	Notification of performance test	Yes	Except that 40 CFR 63.7(b)(1) only applies as specified in 40 CFR 63.6645.
40 CFR 63.7(b)(2)	Notification of rescheduling	Yes	Except that 40 CFR 63.7(b)(2) only applies as specified in 40 CFR 63.6645.
40 CFR 63.7(c)	Quality assurance/test plan	Yes	Except that 40 CFR 63.7(c) only applies as specified in 40 CFR 63.6645.
40 CFR 63.7(d)	Testing facilities	Yes.	
40 CFR 63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at 40 CFR 63.6620.
40 CFR 63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at 40 CFR 63.6620.
40 CFR 63.7(e)(3)	Test run duration	Yes.	
40 CFR 63.7(e)(4)	Administrator may require other testing under Section 114 of the CAA	Yes.	
40 CFR 63.7(f)	Alternative test method provisions	Yes.	
40 CFR 63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
40 CFR 63.7(h)	Waiver of tests	Yes.	
40 CFR 63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at 40 CFR 63.6625.
40 CFR 63.8(a)(2)	Performance specifications	Yes.	
40 CFR 63.8(a)(3)	[Reserved]		
40 CFR 63.8(a)(4)	Monitoring for control devices	No.	

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Section 7 - Other Requirements
7.3 - 40 CFR 63 Subpart A
Requirements (NESHAP)

40 CFR 63.8(b)(1)	Monitoring	Yes.	
40 CFR 63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
40 CFR 63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
40 CFR 63.8(c)(1)(i)	Routine and predictable SSM	No	
40 CFR 63.8(c)(1)(ii)	SSM not in Start-up Shutdown Malfunction Plan	Yes.	
40 CFR 63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
40 CFR 63.8(c)(2)-(3)	Monitoring system installation	Yes.	
40 CFR 63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
40 CFR 63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
40 CFR 63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
40 CFR 63.8(d)	CMS quality control	Yes.	
40 CFR 63.8(e)	CMS performance evaluation	Yes	Except for 40 CFR 63.8(e)(5)(ii), which applies to COMS.
		Except that 40 CFR 63.8(e) only applies as specified in 40 CFR 63.6645.	
40 CFR 63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that 40 CFR 63.8(f)(4) only applies as specified in 40 CFR 63.6645.
40 CFR 63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that 40 CFR 63.8(f)(6) only applies as specified in 40 CFR 63.6645.
40 CFR 63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at 40 CFR 40 CFR 63.6635 and 63.6640.
40 CFR 63.9(a)	Applicability and State delegation of notification requirements	Yes.	
40 CFR 63.9(b)(1)-(5)	Initial notifications	Yes	Except that 40 CFR 63.9(b)(3) is reserved.

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Section 7 - Other Requirements
7.3 - 40 CFR 63 Subpart A
Requirements (NESHAP)

		Except that 40 CFR 63.9(b) only applies as specified in 40 CFR 63.6645.	
40 CFR 63.9(c)	Request for compliance extension	Yes	Except that 40 CFR 63.9(c) only applies as specified in 40 CFR 63.6645.
40 CFR 63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that 40 CFR 63.9(d) only applies as specified in 40 CFR 63.6645.
40 CFR 63.9(e)	Notification of performance test	Yes	Except that 40 CFR 63.9(e) only applies as specified in 40 CFR 63.6645.
40 CFR 63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
40 CFR 63.9(g)(1)	Notification of performance evaluation	Yes	Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.
40 CFR 63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
40 CFR 63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that 40 CFR 63.9(g) only applies as specified in 40 CFR 63.6645.	
40 CFR 63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. 40 CFR 63.9(h)(4) is reserved.
			Except that 40 CFR 63.9(h) only applies as specified in 40 CFR 63.6645.
40 CFR 63.9(i)	Adjustment of submittal deadlines	Yes.	
40 CFR 63.9(j)	Change in previous information	Yes.	
40 CFR 63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
40 CFR 63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
40 CFR	Records related to SSM	No.	

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Section 7 - Other Requirements
7.3 - 40 CFR 63 Subpart A
Requirements (NESHAP)

63.10(b)(2)(i)-(v)			
40 CFR 63.10(b)(2)(vi)-(xi)	Records	Yes.	
40 CFR 63.10(b)(2)(xii)	Record when under waiver	Yes.	
40 CFR 63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
40 CFR 63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
40 CFR 63.10(b)(3)	Records of applicability determination	Yes.	
40 CFR 63.10(c)	Additional records for sources using CEMS	Yes	Except that 40 CFR 63.10(c)(2)-(4) and (9) are reserved.
40 CFR 63.10(d)(1)	General reporting requirements	Yes.	
40 CFR 63.10(d)(2)	Report of performance test results	Yes.	
40 CFR 63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
40 CFR 63.10(d)(4)	Progress reports	Yes.	
40 CFR 63.10(d)(5)	Start-up, shutdown, and malfunction reports	No.	
40 CFR 63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
40 CFR 63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
40 CFR 63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that 40 CFR 63.10(e)(3)(i) (C) is reserved.
40 CFR 63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
40 CFR 63.10(f)	Waiver for recordkeeping/reporting	Yes.	
40 CFR 63.11	Flares	No.	
40 CFR 63.12	State authority and delegations	Yes.	
40 CFR 63.13	Addresses	Yes.	
40 CFR 63.14	Incorporation by reference	Yes.	
40 CFR 63.15	Availability of information	Yes.	

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4. Start-Up Requirements

a. Start-Up Provisions

- i. Pursuant to 35 IAC 201.149, 201.261, and 201.262, the source is authorized to operate in violation of the applicable requirements (as referenced in Conditions 4.1.4 and 4.2.4 of this CAAPP permit) during start-up. The source has applied for such authorization in its application, generally describing the efforts that will be used "...to minimize start-up emissions, duration of individual starts, and frequency of start-ups." As provided by 35 IAC 201.265, authorization in this CAAPP permit for excess emissions during start-up does not shield the source from enforcement for any violation of applicable emission standard(s) that occurs during start-up and only constitutes a prima facie defense to such an enforcement action provided that the source has fully complied with all terms and conditions connected with such authorization.
 - A. This authorization does not relieve the source from the continuing obligation to demonstrate that all reasonable efforts are made to minimize start-up emissions, duration of individual starts, and frequency of start-ups.
 - B. The source shall conduct start-ups in accordance with written start-up procedures prepared by the source and maintained at the source, that are specifically developed to minimize start-up emissions, duration of individual starts, and frequency of start-ups.
- ii. Pursuant to Construction Permit #98110017, at all times, each turbine shall be operated in a manner consistent with good air pollution control practice to minimize emissions of NO_x including: [T1]
 - A. Review of operating parameters of the CT/HRSG's during start-up as necessary to make adjustments to minimize NO_x emissions.
 - B. Review of the operating parameters of the CT/HRSG's during start-up of the duct burners or steam augmentation as necessary to make adjustments to minimize NO_x emissions.

b. Monitoring - Recordkeeping

- i. Pursuant to Section 39.5(7)(b) of the Act, the source shall maintain the following recordkeeping requirements for start-up procedures:
 - A. A copy of the most recent start-up procedures that contains at a minimum:
 - I. Estimate of excess opacity at start-up.
 - II. Reasonable steps that will be used to minimize opacity, duration of individual starts, and frequency of start-ups.
 - B. Records for each individual start-up that contains at a minimum:
 - I. Date, time, duration, and description of the start-up.
 - II. Whether the most recent start-up procedures were performed. If not performed, an explanation why the procedures were not performed.
 - III. Whether operating personnel for the turbines or air environmental staff are on site during start-up.

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- ii. Pursuant to Construction Permit #98110017, the Permittee shall maintain following records for each CT/HRSO related to start-up: [T1]
 - A. The time and date of start-up of the CT/HRSO, and confirmation that standard practices were followed.
 - B. The time and date of start-up of the duct burners or power augmentation in the CT/HRSO, and confirmation that standard practices were followed.

c. Monitoring - Reporting

Pursuant to Sections 39.5(7)(b) and (f) of the Act, the source shall submit the following reporting requirements:

i. Prompt Reporting

A Deviation Report shall be submitted to the IEPA, Compliance Section (addresses are included Attachment 3) within five (5) days if a start-up exceeded the opacity estimates in the start-up procedures or opacity exceeded any applicable standard or limit not authorized to be violated during start-up.

ii. Semiannual Reporting

As part of the required Semiannual Monitoring Reports, the source shall submit a start-up report including the following at a minimum: a list of the start-ups including the date, duration, and description of each start-up accompanied by any explanations whether the most recent start-up procedures were or were not performed and whether normal operation was or was not achieved in the allowed duration.

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5. Acid Rain Permit

**ACID RAIN PROGRAM
PERMIT**

217-785-1705

Kendall Power Company LLC
Attn: Randy O'Keefe, Plant Manager
1401 County Line Road
Minooka, Illinois 60447

Oris No.: 55131
IEPA I.D. No.: 093808AAD
Source/Unit: Kendall Power Plant
Date Received: August 8, 2019

STATEMENT OF BASIS:

In accordance with Section 39.5(17)(b) of 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 to Kendall Power Company LLC for 1401 County Line Road, Minooka, Illinois 60447.

SULFUR DIOXIDE (SO₂) ALLOCATIONS AND NITROGEN OXIDE (NO_x) REQUIREMENTS FOR EACH AFFECTED UNIT:

GTGZ 1 - 4 (Unit 1/HRSG 1 - Unit 4/HRSG 4)	SO ₂ Allowances	These units are not entitled to an allocation of SO ₂ allowances pursuant to 40 CFR Part 73.
	NO _x limit	These units are not subject to a NO _x emissions limitation pursuant to 40 CFR Part 76.

PERMIT APPLICATION: The permit application, which includes SO₂ allowance requirements and other standard requirements, 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 SO₂ emissions and requires the owners and operators to hold SO₂ allowances 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. Although this plant is not eligible for an allowance allocated by USEPA, the owners or operators may obtain SO₂ allowances to cover emissions from other sources under a marketable allowance program. 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 and requires the owners and operators to monitor NO_x emissions from affected units in accordance with applicable provisions of 40 CFR Part 75. These units are not subject to a NO_x emission limitation because USEPA has not adopted such limitation for combined cycle turbines.

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This Acid Rain Program permit does not authorize the construction and operation of the affected units as such matters are addressed by Titles I and V of the Clean Air Act. This permit also does not affect the source's responsibility to meet all other applicable local, state and federal requirements, including 35 IAC Part 225, Subparts C, D, and E.

If you have any questions regarding this permit, please contact Geoffrey Blood at 217/785-1705.

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:MTR:GJB:tan

cc: Beth Valenziano, USEPA Region V
Illinois EPA Region 1

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Facility (Source) Name (from STEP 1)

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

Dyngey Kendall Energy, LLC
Facility (Source) Name (from STEP 1)

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

Dyngey Kendall Energy, LLC
Facility (Source) Name (from STEP 1)

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	Randy O'Keefe	
Signature	<i>Randy O'Keefe</i>	Date 8/2/19

6. CSAPR Transport Rule Trading Program

a. Transport Rule (TR) Trading Program Title V Requirements

i. Description of TR Monitoring Provisions

The TR subject unit(s), and the unit-specific monitoring provisions at this source, are identified in the following table. These units are subject to the requirements for the TR NO_x Annual Trading Program, TR NO_x Ozone Season Trading Program, and TR SO₂ Group 1 Trading Program.

Unit ID:	GTGZ 1-4, Natural Gas-Fired Turbines with associated HRSG units				
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, subpart B (for SO ₂ monitoring) and 40 CFR part 75, subpart H (for NO _x monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E	Low Mass Emissions monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, subpart E
SO ₂	-----	X	-----	-----	-----
NO _x	X	-----	-----	-----	-----
Heat input	-----	X	-----	-----	-----

- A. The above description of the monitoring used by a unit does not change, create and exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.430 through 97.435 (TR NO_x Annual Trading Program), 97.530 through 97.535 (TR NO_x Ozone Season Trading Program), and/or 97.630 through 97.635 (TR SO₂ Group 1 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable TR trading programs.
- B. Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at <https://www.epa.gov/airmarkets/monitoring-plans-part-75-sources>.
- C. Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR part 75, subpart E and 40 CFR 75.66 and 97.435 (TR NO_x Annual Trading Program), 97.535 (TR NO_x Ozone Season Trading Program), and 97.635 (TR SO₂ Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at <https://www.epa.gov/airmarkets/part-75-petition-responses>.

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- D. Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.430 through 97.434 (TR NO_x Annual Trading Program), 97.530 through 97.534 (TR NO_x Ozone Season Trading Program), and 97.630 through 97.634 (TR SO₂ Group 1 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.435 (TR NO_x Annual Trading Program), 97.535 (TR NO_x Ozone Season Trading Program), and 97.635 (TR SO₂ Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on EPA's website at <https://www.epa.gov/airmarkets/part-75-petition-responses>.
- E. The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.430 through 97.434 (TR NO_x Annual Trading Program), 97.530 through 97.534 (TR NO_x Ozone Season Trading Program), and 97.630 through 97.634 (TR SO₂ Group 1 Trading Program), and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B), may be used to add to or change this unit's monitoring system description.
- ii. **TR NO_x Annual Trading Program Requirements (40 CFR 97.406)**
- A. **(a) Designated representative requirements.**
- The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.413 through 97.418.
- B. **(c) NO_x emissions requirements.**
- (1) TR NO_x Annual emissions limitation.
- (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO_x Annual source and each TR NO_x Annual unit at the source 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) in an amount not less than the tons of total NO_x emissions for such control period from all TR NO_x Annual units at the source.
- (ii). 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 (c)(1)(i) above, then:
- (A). The owners and operators of the source 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
- (B). The owners and operators of the source 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.

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- (2) TR NO_x Annual assurance provisions.
- (i). 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 the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO_x Annual allowances available for deduction for such control period under 40 CFR 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.425(b), of multiplying— (A) The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total NO_x emissions from all TR NO_x Annual units at TR NO_x Annual sources in the state for such control period exceed the state assurance level.
 - (ii). The owners and operators shall hold the TR NO_x Annual allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
 - (iii) Total NO_x emissions from all TR NO_x Annual units at TR NO_x Annual sources in the State during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the state NO_x Annual trading budget under 40 CFR 97.410(a) and the state's variability limit under 40 CFR 97.410(b).
 - (iv). It shall not be a violation of 40 CFR part 97, subpart AAAAA or of the Clean Air Act if total NO_x emissions from all TR NO_x Annual units at TR NO_x Annual sources in the State during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the TR NO_x Annual units at TR NO_x Annual sources in the state during a control period exceeds the common designated representative's assurance level.
 - (v). To the extent the owners and operators fail to hold TR NO_x Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above, (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under

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the Clean Air Act; and(B). Each TR NO_x Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.

(3) Compliance periods.

(i). A TR NO_x Annual unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.

(ii). A TR NO_x Annual unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance.

(i). A TR NO_x Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) above 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.

(ii). A TR NO_x Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above 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.

(5) 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.

(6) 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:

(i). Such authorization shall only be used in accordance with the TR NO_x Annual Trading Program; and

(ii). Notwithstanding any other provision of 40 CFR part 97, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property right.

A TR NO_x Annual allowance does not constitute a property right.

C. **(d) Title V permit revision requirements.**

(1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO_x Annual allowances in accordance with 40 CFR part 97, subpart AAAAA.

(2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.430 through 97.435, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.406(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

D. **(f) Liability.**

(1) Any provision of the TR NO_x Annual Trading Program that applies to a TR NO_x Annual source or the designated representative of a TR NO_x Annual source shall also apply to the owners and operators of such source and of the TR NO_x Annual units at the source.

(2) Any provision of the TR NO_x Annual Trading Program that applies to a TR NO_x Annual unit or the designated representative of a TR NO_x Annual unit shall also apply to the owners and operators of such unit.

E. **(g) Effect on other authorities.**

No provision of the TR NO_x Annual Trading Program or exemption under 40 CFR 97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO_x Annual source or TR NO_x Annual unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

F. Compliance Method

I. **(b) Emissions monitoring, reporting, and recordkeeping requirements**

(1) The owners and operators, and the designated representative, of each TR NO_x Annual source and each TR NO_x Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.430 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.431 (initial monitoring system certification and recertification procedures), 97.432 (monitoring system out-of-control periods), 97.433 (notifications concerning monitoring), 97.434 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

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- (2) The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of TR NO_x Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to determine compliance with the TR NO_x Annual emissions limitation and assurance provisions under paragraph (c) above ((c) NO_x emissions requirements in Condition 7.6(a)(ii)(B)), provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

II. **(e) Additional recordkeeping and reporting requirements**

- (1) Unless otherwise provided, the owners and operators of each TR NO_x Annual source and each TR NO_x Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
- (i). The certificate of representation under 40 CFR 97.416 for the designated representative for the source and each TR NO_x Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416 changing the designated representative.
- (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart AAAAA.
- (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO_x Annual Trading Program.
- (2) The designated representative of a TR NO_x Annual source and each TR NO_x Annual unit at the source shall make all submissions required under the TR NO_x Annual Trading Program, except as provided in 40 CFR 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

iii. **TR NO_x Ozone Season Trading Program Requirements (40 CFR 97.506)**

A. **(a) Designated representative requirements.**

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.513 through 97.518.

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B. (c) NO_x emissions requirements.

(1) TR NO_x Ozone Season emissions limitation.

- (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO_x Ozone Season source and each TR NO_x Ozone Season unit at the source 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) in an amount not less than the tons of total NO_x emissions for such control period from all TR NO_x Ozone Season units at the source.
- (ii). 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 paragraph (c)(1)(i) above, then: (A). The owners and operators of the source and each TR NO_x Ozone Season unit at the source shall hold the TR NO_x Ozone Season allowances required for deduction under 40 CFR 97.524(d); and (B). The owners and operators of the source 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.

(2) TR NO_x Ozone Season assurance provisions.

- (i). 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 the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO_x Ozone Season allowances available for deduction for such control period under 40 CFR 97.525(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.525(b), of multiplying- (A). The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and (B). The amount by which total NO_x emissions from all TR NO_x Ozone Season units at TR NO_x Ozone Season sources in the state for such control period exceed the state assurance level.

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- (ii). The owners and operators shall hold the TR NO_x Ozone Season allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
 - (iii). Total NO_x emissions from all TR NO_x Ozone Season units at TR NO_x Ozone Season sources in the state during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the State NO_x Ozone Season trading budget under 40 CFR 97.510(a) and the state's variability limit under 40 CFR 97.510(b).
 - (iv). It shall not be a violation of 40 CFR part 97, subpart BBBBB or of the Clean Air Act if total NO_x emissions from all TR NO_x Ozone Season units at TR NO_x Ozone Season sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the TR NO_x Ozone Season units at TR NO_x Ozone Season sources in the state during a control period exceeds the common designated representative's assurance level.
 - (v). To the extent the owners and operators fail to hold TR NO_x Ozone Season allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above, (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and (B). Each TR NO_x Ozone Season allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart BBBBB and the Clean Air Act.
- (3) Compliance periods.
- (i). A TR NO_x Ozone Season unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.
 - (ii). A TR NO_x Ozone Season unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
- (i). A TR NO_x Ozone Season allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR NO_x Ozone Season allowance that was allocated for such control period or a control period in a prior year.

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(ii). A TR NO_x Ozone Season allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NO_x Ozone Season 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.

(5) 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.

(6) 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:

(i). Such authorization shall only be used in accordance with the TR NO_x Ozone Season Trading Program; and

(ii). Notwithstanding any other provision of 40 CFR part 97, subpart BBBBB, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property right.

A TR NO_x Ozone Season allowance does not constitute a property right.

C. (d) Title V permit revision requirements.

(1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO_x Ozone Season allowances in accordance with 40 CFR part 97, subpart BBBBB.

(2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.530 through 97.535, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.506(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

D. (f) Liability.

(1) Any provision of the TR NO_x Ozone Season Trading Program that applies to a TR NO_x Ozone Season source or the designated representative of a TR NO_x Ozone Season source shall also apply to the owners and operators of such source and of the TR NO_x Ozone Season units at the source.

(2) Any provision of the TR NO_x Ozone Season Trading Program that applies to a TR NO_x Ozone Season unit or the designated representative of a TR

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NO_x Ozone Season unit shall also apply to the owners and operators of such unit.

E. (g) Effect on other authorities.

No provision of the TR NO_x Ozone Season Trading Program or exemption under 40 CFR 97.505 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO_x Ozone Season source or TR NO_x Ozone Season unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

F. Compliance Method (Operational and Production Requirements)

I. (b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each TR NO_x Ozone Season source and each TR NO_x Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.530 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.531 (initial monitoring system certification and recertification procedures), 97.532 (monitoring system out-of-control periods), 97.533 (notifications concerning monitoring), 97.534 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.535 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.530 through 97.535 shall be used to calculate allocations of TR NO_x Ozone Season allowances under 40 CFR 97.511(a)(2) and (b) and 97.512 and to determine compliance with the TR NO_x Ozone Season emissions limitation and assurance provisions under paragraph (c) above ((c) NO_x emissions requirements in Condition 7.6(a)(iii)(B)), provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.530 through 97.535 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

II. (e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each TR NO_x Ozone Season source and each TR NO_x Ozone Season unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (i). The certificate of representation under 40 CFR 97.516 for the designated representative for the source and each TR NO_x Ozone Season unit at the source and all documents that demonstrate the truth of the statements

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in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.516 changing the designated representative.

(ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart BBBBB.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO_x Ozone Season Trading Program.

(2) The designated representative of a TR NO_x Ozone Season source and each TR NO_x Ozone Season unit at the source shall make all submissions required under the TR NO_x Ozone Season Trading Program, except as provided in 40 CFR 97.518. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

vi. TR SO₂ Group 1 Trading Program requirements (40 CFR 97.606)

A. (a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.613 through 97.618.

B. (c) SO₂ emissions requirements.

(1) TR SO₂ Group 1 emissions limitation.

(i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR SO₂ Group 1 source and each TR SO₂ Group 1 unit at the source 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) in an amount not less than the tons of total SO₂ emissions for such control period from all TR SO₂ Group 1 units at the source.

(ii). 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)(1)(i) above, then:

(A). The owners and operators of the source 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

(B). The owners and operators of the source and each TR SO₂ Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed,

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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 40 CFR part 97, subpart CCCCC and the Clean Air Act.

- (2) TR SO₂ Group 1 assurance provisions.
- (i). 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 the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO₂ emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.625(b), of multiplying- (A). The quotient of the amount by which the common designated representative's share of such SO₂ emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such SO₂ emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total SO₂ emissions from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state for such control period exceed the state assurance level.
- (ii). The owners and operators shall hold the TR SO₂ Group 1 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (iii). Total SO₂ emissions from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state during a control period in a given year exceed the state assurance level if such total SO₂ emissions exceed the sum, for such control period, of the state SO₂ Group 1 trading budget under 40 CFR 97.610(a) and the state's variability limit under 40 CFR 97.610(b).
- (iv). It shall not be a violation of 40 CFR part 97, subpart CCCCC or of the Clean Air Act if total SO₂ emissions from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total SO₂ emissions from the TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state during a control period exceeds the common designated representative's assurance level. (v). To the extent the owners and operators fail to hold TR SO₂ Group 1 allowances for a control period in a

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given year in accordance with paragraphs (c)(2)(i) through (iii) above, (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and (B). Each TR SO₂ Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart CCCCC and the Clean Air Act.

(3) Compliance periods.

- (i). A TR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
- (ii). A TR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance.

- (i). A TR SO₂ Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) above 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.
- (ii). A TR SO₂ Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above 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.

(5) 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.

(6) 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:

- (i). Such authorization shall only be used in accordance with the TR SO₂ Group 1 Trading Program; and
- (ii). Notwithstanding any other provision of 40 CFR part 97, subpart CCCCC, the Administrator has the authority to terminate or limit the use and duration of such

authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property right.

A TR SO₂ Group 1 allowance does not constitute a property right.

C. (d) Title V permit revision requirements.

(1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR SO₂ Group 1 allowances in accordance with 40 CFR part 97, subpart CCCCC.

(2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.630 through 97.635, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.606(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

D. (f) Liability.

(1) Any provision of the TR SO₂ Group 1 Trading Program that applies to a TR SO₂ Group 1 source or the designated representative of a TR SO₂ Group 1 source shall also apply to the owners and operators of such source and of the TR SO₂ Group 1 units at the source.

(2) Any provision of the TR SO₂ Group 1 Trading Program that applies to a TR SO₂ Group 1 unit or the designated representative of a TR SO₂ Group 1 unit shall also apply to the owners and operators of such unit.

E. (g) Effect on other authorities.

No provision of the TR SO₂ Group 1 Trading Program or exemption under 40 CFR 97.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR SO₂ Group 1 source or TR SO₂ Group 1 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

F. Compliance Method

I. (b) Emissions monitoring, reporting, and recordkeeping requirements.

(1) The owners and operators, and the designated representative, of each TR SO₂ Group 1 source and each TR SO₂ Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.630 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.631 (initial monitoring system certification and recertification procedures), 97.632 (monitoring system out-of-control periods), 97.633 (notifications concerning monitoring), 97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification),

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and 97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

- (2) The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of TR SO₂ Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the TR SO₂ Group 1 emissions limitation and assurance provisions under paragraph (c) above ((c) SO₂ emissions requirements in Condition 7.6(a)(vi)(B)), provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

II. **(e) Additional recordkeeping and reporting requirements.**

- (1) Unless otherwise provided, the owners and operators of each TR SO₂ Group 1 source and each TR SO₂ Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (i). The certificate of representation under 40 CFR 97.616 for the designated representative for the source and each TR SO₂ Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.616 changing the designated representative.
 - (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart CCCCC.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR SO₂ Group 1 Trading Program.
- (2) The designated representative of a TR SO₂ Group 1 source and each TR SO₂ Group 1 unit at the source shall make all submissions required under the TR SO₂ Group 1 Trading Program, except as provided in 40 CFR 97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

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Section 8 - State Only Requirements

1. Permitted Emissions for Purposes of Fees

- a. The annual emissions from the source solely for purposes of "Duty to Pay Fees" of Condition 2.3(e), not considering insignificant activities as addressed by Section 6, shall not exceed the following: [Section 39.5(18)(a)(ii) of the Act]

<i>Pollutant</i>		<i>Tons/Year</i>
Volatile Organic Material	(VOM)	40.235
Sulfur Dioxide	(SO ₂)	40.025
Particulate Matter	(PM)	215.675
Nitrogen Oxides	(NO _x)	391.175
HAP, not included in VOM or PM	(HAP)	20.01
Total		707.12

- 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]

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Attachment 1 - List of Emission Units at This Source

<i>Section</i>	<i>Emission Units</i>	<i>Description</i>
4.1	Four Natural Gas Fired Turbines	The turbines were built in June 1999 and are nominal 2166 MMBtu/hr each. They have Low NO _x Burners and SCRs as control devices and run a NO _x CEMS, and CO and O ₂ monitors.
4.2	Four Heat Recovery Steam Generators	The HRSGs were built in June 1999 and are nominal 350 MMBtu/hr each. They have Low NO _x Burners and SCRs as control devices and run a NO _x CEMS, and CO and O ₂ monitors.
4.3	Natural Gas Fired Fuel Heater	The fuel heater is nominal 20.1 MMBtu/hr. It was built in June 1999 and has Low NO _x Burners as a control device.
4.4	Cooling Towers	The cooling tower has 18 cells and was built in 1999. The cooling tower uses drift eliminators to control PM emissions.

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Attachment 2 - Acronyms and Abbreviations

acfm	Actual cubic feet per minute
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
ATU	Allotment trading unit
BACT	Best Available Control Technology
BAT	Best Available Technology
Btu	British Thermal Units
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
CISWI	Commercial Industrial Solid Waste Incinerator
CO	Carbon monoxide
CO ₂	Carbon dioxide
COMS	Continuous Opacity Monitoring System
CPMS	Continuous Parameter Monitoring System
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
GHG	Green house gas
GACT	Generally Acceptable Control Technology
gr	Grains
HAP	Hazardous air pollutant
Hg	Mercury
HMIWI	Hospital medical infectious waste incinerator
hp	Horsepower
hr	Hour
H ₂ S	Hydrogen sulfide
I.D. No.	Identification number of source, assigned by IEPA
IAC	Illinois Administrative Code
ILCS	Illinois Compiled Statutes
IEPA	Illinois Environmental Protection Agency
kw	Kilowatts
LAER	Lowest Achievable Emission Rate

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lbs	Pound
m	Meter
MACT	Maximum Achievable Control Technology
M	Thousand
MM	Million
mos	Month
MSDS	Material Safety Data Sheet
MSSCAM	Major Stationary Sources Construction and Modification (Non-attainment New Source Review)
MW	Megawatts
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen oxides
NSPS	New Source Performance Standards
NSR	New Source Review
PB	Lead
PEMS	Predictive Emissions Monitoring System
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
ppmv	Parts per million by volume
ppmw	Parts per million by weight
PSD	Prevention of Significant Deterioration
PSEU	Pollutant-Specific Emission Unit
psia	Pounds per square inch absolute
PTE	Potential to emit
RACT	Reasonable Available Control Technology
RMP	Risk Management Plan
scf	Standard cubic feet
SCR	Selective catalytic reduction
SIP	State Implementation Plan
SO ₂	Sulfur dioxide
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
VOM	Volatile organic material

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Attachment 3 - Contact and Reporting Addresses

<p style="text-align: center;">IEPA Compliance Section</p> <p style="text-align: center;">IEPA Stack Test Specialist</p> <p style="text-align: center;">IEPA Air Quality Planning Section</p> <p style="text-align: center;">IEPA Air Regional Field Operations Regional Office #1</p> <p style="text-align: center;">IEPA Permit Section</p>	<p>Illinois EPA, Bureau of Air Compliance & Enforcement Section (MC 40) 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276</p> <p>Phone No.: 217/782-2113</p> <p>Illinois EPA, Bureau of Air Compliance Section Source Monitoring - Third Floor 9511 Harrison Street Des Plaines, Illinois 60016</p> <p>Phone No.: 847/294-4000</p> <p>Illinois EPA, Bureau of Air Air Quality Planning Section (MC 39) 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276</p> <p>Phone No.: 217/782-2113</p> <p>Illinois EPA, Bureau of Air Regional Office #1 9511 Harrison Street Des Plaines, Illinois 60016</p> <p>Phone No.: 847/294-4000</p> <p>Illinois EPA, Bureau of Air Permit Section (MC 11) 1021 North Grand Avenue East P.O. Box 19506 Springfield, Illinois 62794-9506</p> <p>Phone No.: 217/785-1705</p>
<p style="text-align: center;">USEPA Region 5 - Air Branch</p>	<p>USEPA (AR - 17J) Air and Radiation Division 77 West Jackson Boulevard Chicago, Illinois 60604</p> <p>Phone No.: 312/353-2000</p>

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Attachment 4 - Example Certification by a Responsible Official

SIGNATURE BLOCK

NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE DEEMED AS INCOMPLETE.

I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE. ANY PERSON WHO KNOWINGLY MAKES A FALSE, FICTITIOUS, OR FRAUDULENT MATERIAL STATEMENT, ORALLY OR IN WRITING, TO THE ILLINOIS EPA COMMITS A CLASS 4 FELONY. A SECOND OR SUBSEQUENT OFFENSE AFTER CONVICTION IS A CLASS 3 FELONY. (415 ILCS 5/44(H))

AUTHORIZED SIGNATURE:

BY:

AUTHORIZED SIGNATURE

TITLE OF SIGNATORY

_____/_____/_____

TYPED OR PRINTED NAME OF SIGNATORY

DATE

Kendall Power Plant
I.D. No.: 093808AAD
Permit No.: 03030002

Date Received: 08/08/2019
Date Issued: 6/29/2020
Date Effective: 6/30/2020
Date Revised: 6/14/2021

Matoesian, Charles

Subject: FW: Alternate Language
Attachments: 35 IAC 216 redline.doc

Rory:

On our call, you asked about suggested language revisions for the catalytic cracker illustration. Attached is redlined Part 216 with sample language for discussion. I'm in the office all week, if you have an opportunity to discuss.

Best regards,
W. Brad Sims
Environment, Regulatory & Sustainability Advisor
Global Operations & Sustainability

Exxon Mobil Corporation
25915 S. Frontage Road
Channahon, IL 60410
(815) 860 7041 Office
(815) 351 2282 Cell

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**TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: AIR POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: EMISSION STANDARDS AND LIMITATIONS
FOR STATIONARY SOURCES**

**PART 216
CARBON MONOXIDE EMISSIONS**

SUBPART A: GENERAL PROVISIONS

Section	
216.100	Scope and Organization
216.101	Measurement Methods
216.102	Abbreviations and Conversion Factors
216.103	Definitions
216.104	Incorporations by Reference

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SUBPART B: FUEL COMBUSTION EMISSION SOURCES

Section	
216.121	Fuel Combustion Emission Sources
216.122	Exception, Midwest Grain Products

SUBPART C: INCINERATORS

Section	
216.141	Incinerators
216.142	Exceptions

SUBPART N: PETROLEUM REFINING AND CHEMICAL MANUFACTURE

Section	
216.361	Petroleum and Petrochemical Processes
216.362	Polybasic Organic Acid Partial Oxidation Manufacturing Processes

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SUBPART O: PRIMARY AND FABRICATED METAL PRODUCTS

Section	
216.381	Cupolas
216.382	Exception, General Motor's Ferrous Foundry in Vermilion County

Carbon Monoxide concentrations in an effluent stream shall be measured by the non-dispersive infrared method or by other methods approved by the Illinois Environmental Protection Agency (Agency) according to the provisions of 35 Ill. Adm. Code 201.

Section 216.102 Abbreviations and Conversion Factors

a) The following abbreviations are used in this Part:

btu	British thermal unit (60°F)
CO	carbon monoxide
°C	degrees Centigrade
°F	degrees Fahrenheit
kg	kilograms
lbs	pounds
mmbtu/hr	million btu per hour
MW	Megawatts; one million watts
ppm	parts per million

b) The following conversion factors have been used in this Part:

<u>English</u>	<u>Metric</u>
1.0 mmbtu/hr	0.293 MW
2.205 lbs	1 kg

Section 216.103 Definitions

The definitions contained in 35 Ill. Adm. Code 201 and 211 apply to this Part. The definitions for "catalytic cracking unit" and "hot standby" in 40 CFR 63.1579 apply to Subpart N of this Part. The definitions of "startup" and "shutdown" from 40 CFR 63.2 apply to Subpart N of this Part.

Section 216.104 Incorporations by Reference

The following materials are incorporated by reference: non-dispersive infrared method, 40 CFR 60, Appendix A, Method 10 (1982); 40 CFR 63.2 (year); 40 CFR 63, Subpart UUU (year);

SUBPART B: FUEL COMBUSTION EMISSION SOURCES

Section 216.121 Fuel Combustion Emission Sources

by other equivalent air pollution control equipment approved by the Agency according to the provisions of 35 Ill. Adm. Code 201.

- b) Notwithstanding subsection (a), any existing petroleum or petrochemical process using catalyst regenerators of fluidized catalytic converters equipped for in situ combustion of carbon monoxide, may emit a carbon monoxide waste gas stream into the atmosphere if the carbon monoxide concentration of such waste gas stream is less than or equal to 750 ppm corrected to 50 percent excess air.
- c) Notwithstanding subsection (a), any new petroleum or petrochemical process using catalyst regenerators of fluidized catalytic converters equipped for in situ combustion of carbon monoxide, may emit a carbon monoxide waste gas stream into the atmosphere if the carbon monoxide concentration of such waste gas stream is less than or equal to 350 ppm corrected to 50 percent excess air.
- d) Notwithstanding subsection (a), during periods of startup, shutdown and hot standby, any new or existing petroleum catalytic cracking units can elect to comply with subsection (a) or the alternate standards for these operating modes in 40 CFR 63 Subpart UUU Table 9 and 40 CFR 63.1565(a)(5).

Section 216.362 Polybasic Organic Acid Partial Oxidation Manufacturing Processes

No person shall cause or allow the emission of any gases containing carbon monoxide into the atmosphere from any polybasic organic acid partial oxidation manufacturing process unless the total fuel value of the waste gas stream is less than 30 percent of that required for flame incineration of the waste gas stream at 793°C (1460°F) without heat exchange. Polybasic organic acid partial oxidation manufacturing processes not meeting the above conditions shall burn such waste gas stream in a direct flame afterburner to achieve a resulting concentration of carbon monoxide in such waste gas stream of less than or equal to 200 ppm or shall employ such other equivalent control method or equipment as may be approved by the Agency according to the provisions of 35 Ill. Adm. Code 201.

SUBPART O: PRIMARY AND FABRICATED METAL PRODUCTS

Section 216.381 Cupolas

No person shall cause or allow the emission of gases containing carbon monoxide into the atmosphere from any cupola with a manufacturer's rated melt rate in excess of 5 tons

216.141	206(b)
216.142	206(b)(1) and (2)
216.361	206(c)
216.362	206(h)
216.381	206(e)
Appendix C	206(g)

Appendix C
Compliance Dates

Every owner or operator of a new emission source was required to comply with the standards and limitations of this Part by April 14, 1972.

Every owner or operator of an existing emission source was required to comply with the standards and limitations of this Part by December 31, 1973.

Matoesian, Charles

Subject: FW: [External] RE:
Attachments: SSM Proposal (Dnyegy).pdf

From: More, Joshua <joshua.more@afslaw.com>
Sent: Friday, January 13, 2023 10:43:58 AM
To: Vetterhoffer, Dana <Dana.Vetterhoffer@Illinois.gov>
Cc: Sawula, Andrew N. <andrew.sawula@afslaw.com>
Subject: [External] RE:

Dana

Attached is a copy of our current proposal to address the SSM SIP call. Please let us know of any questions or concerns.

Thanks
Josh

**ArentFox
Schiff**

Joshua R. More

PARTNER AND ENVIRONMENTAL PRACTICE CO-LEADER | ARENTFOX SCHIFF LLP
(HE/HIM/HIS)

joshua.more@afslaw.com | 312.258.5769 **DIRECT**

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233 South Wacker Drive, Suite 7100, Chicago, IL 60606

From: Vetterhoffer, Dana [<mailto:Dana.Vetterhoffer@Illinois.gov>]
Sent: Thursday, January 12, 2023 1:20 PM
To: More, Joshua <jmore@schiffhardin.com>
Subject: [EXT]

Hi Josh. If you could send us the proposed language, it'd be appreciated.

Thanks,

Dana Vetterhoffer
Deputy General Counsel, Air Regulatory Unit
Illinois Environmental Protection Agency
(217)782-5544 fax: (217)782-9807

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VISTRA DRAFT PROPOSAL
SMB REVISIONS TO IL OPACITY STANDARDS

Section 212.124 **Exceptions**

d) During times of startup, malfunction or breakdown of coal-fired boiler 1 at the Newton Power Station or coal-fired boiler 1 or 2 at the Kincaid Power Station, or of the air pollution control equipment serving those 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.

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-HQ-OAR-2021-0863; FRL-9250-01-OAR]

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

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final action.

SUMMARY: The Environmental Protection Agency (EPA) is taking final action to find that 12 States and local air pollution control agencies failed to submit State Implementation Plan (SIP) revisions required by the Clean Air Act (CAA) in a timely manner to address EPA's 2015 findings of substantial inadequacy and "SIP calls" for provisions applying to excess emissions during periods of startup, shutdown, and malfunction (SSM). This action triggers certain CAA deadlines for the EPA to impose sanctions if a State does not submit a complete SIP revision addressing the outstanding requirements and to promulgate a Federal Implementation Plan (FIP) if the EPA does not approve the State's submission as a SIP revision.

DATES: This action is effective February 11, 2022.

FOR FURTHER INFORMATION CONTACT:

General questions concerning this notice should be addressed to, Erin Lowder, Office of Air Quality Planning and Standards, Air Quality Policy Division, 109 T.W. Alexander Drive, Research Triangle Park, NC 27711; by telephone (919) 541-5421; or by email at lowder.erin@epa.gov.

SUPPLEMENTARY INFORMATION:

I. General Information

A. How is the preamble organized?

The information presented in this preamble is organized as follows:

Table of Contents

I. General Information

- A. How is the preamble organized?
- B. Notice and Comment Under the Administrative Procedure Act (APA)
- C. How can I get copies of this document and other related information?
- D. Where do I go if I have specific air agency questions?
- II. Background
- III. Consequences of Findings of Failure To Submit
- IV. Findings of Failure To Submit for Air Agencies That Failed To Make a SIP Submittal To Address EPA's 2015 SIP Calls for Provisions Applying To Excess Emissions During SSM Periods
- V. Environmental Justice Considerations
- VI. Statutory and Executive Order Reviews
 - A. Executive Order 12866: Regulatory Planning and Executive Order 13563: Improving Regulation and Regulatory Review
 - B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs
 - C. Paperwork Reduction Act (PRA)
 - D. Regulatory Flexibility Act (RFA)
 - E. Unfunded Mandates Reform Act of 1995 (UMRA)
 - F. Executive Order 13132: Federalism
 - G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments
 - H. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks
 - I. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution or Use
 - J. National Technology Transfer and Advancement Act (NTTAA)
 - K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority and Low Income Populations
 - L. Congressional Review Act (CRA)
 - M. Judicial Review

B. Notice and Comment Under the Administrative Procedure Act (APA)

Section 553(b)(3)(B) of the Administrative Procedure Act (APA), 5 U.S.C. 553(b)(3)(B), provides that, when an agency for good cause finds that notice and public procedures are impracticable, unnecessary, or contrary to the public interest, the agency may issue a rule without providing notice and an opportunity for public comment. The EPA has determined that there is good cause for making this final agency action without prior proposal and opportunity for comment because no significant EPA judgment is involved in making findings of failure to submit SIPs, or elements of SIPs, required by

the Clean Air Act (CAA), where states have made no submissions to meet the requirement. As is discussed in further detail later, pursuant to CAA section 110(k)(1)(B), the EPA "shall determine" no later than 6 months after the date by which a state is required to submit a SIP whether a state has made a submission that meets the minimum completeness criteria established pursuant to CAA section 110(k)(1)(A). EPA exercises no significant judgment in making a determination that a state failed to make a submission and subsequently issuing a finding of failure to submit. Thus, notice and public procedures are unnecessary to take this action. The EPA finds that this constitutes good cause under 5 U.S.C. 553(b)(3)(B).

C. How can I get copies of this document and other related information?

The EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2021-0863. Publicly available docket materials are available either electronically through <http://www.regulations.gov> or in hard copy at the EPA Docket Center, EPA/DC, William Jefferson Clinton Building, Room 3334, 1301 Constitution Avenue NW, Washington, DC. Out of an abundance of caution for members of the public and our staff, the EPA Docket Center and Reading Room are closed to the public, with limited exceptions, to reduce the risk of transmitting COVID-19. Our Docket Center staff will continue to provide remote customer service via email, phone, and webform. The telephone number for the Public Reading Room is (202) 566-1744 and the telephone number for the Office of Air and Radiation Docket and Information Center is (202) 566-1742. For further information on EPA Docket Center services and the current status, please visit us online at <https://www.epa.gov/dockets>.

D. Where do I go if I have specific air agency questions?

For questions related to specific air agencies mentioned in this notice, please contact the appropriate EPA Regional Office:

Regional offices	Air agencies
EPA Region 1: Mr. John Rogan, Chief, Air Program Branch, EPA Region 1, 5 Post Office Square, Boston, MA 02109. rogan.john@epa.gov .	Rhode Island.
EPA Region 3: Mr. Mike Gordon, Chief, Planning and Implementation Branch, EPA Region 3, 1650 Arch Street, Philadelphia, PA 19103. gordon.mike@epa.gov .	District of Columbia.

California alleging that the EPA is in violation of its mandatory duty to issue findings of failure to submit for those states that have not yet responded to the 2015 SIP Call.⁵

III. Consequences of Findings of Failure To Submit

If the EPA finds that a state has failed to make the required SIP submittal or that a submitted SIP is incomplete, then CAA section 179(a) establishes specific consequences, after a period of time, including the imposition of mandatory sanctions under CAA section 179(b) for the affected areas or states. The two applicable sanctions enumerated in CAA section 179(b) are: (1) The 2-to-1 emission offset requirement for all new and modified major sources subject to the nonattainment NSR program, and (2) restrictions on highway funding. Additionally, a finding that a state has failed to submit a complete SIP triggers an obligation under CAA section 110(c) for the EPA to promulgate a FIP no later than 2 years after issuance of the finding of failure to submit if the affected state has not submitted, and the EPA has not approved, the required SIP submittal.

With respect to mandatory sanctions, if the EPA has not affirmatively determined that a state has made the required complete SIP submittal within 18 months⁶ of the effective date of this final action, then, pursuant to CAA section 179(a) and (b) and 40 CFR 52.31, the offset sanction identified in CAA section 179(b)(2) will apply in the affected nonattainment area or state. If the EPA has not affirmatively determined that the state has made the required complete SIP submittal within 6 months after the offset sanction is imposed, then the highway funding sanction will apply in the affected nonattainment area(s), in accordance with CAA section 179(b)(1) and 40 CFR 52.31.⁷ The sanctions will not take effect if, within 18 months after the effective date of these findings, the EPA affirmatively determines that the state has made a complete SIP submittal addressing the deficiency for which the finding was made. Additionally, if the state makes the required SIP submittal and the EPA takes final action to approve the submittal within 2 years of the effective date of these findings, the EPA is not required to promulgate a FIP.

⁵ *Sierra Club et al. v. Regan et al.*, No. 4:21-cv-06956 (N.D. Cal. Sept 8, 2021).

⁶ C.A.A. 110(k)(5).

⁷ Such highway sanctions would only apply in nonattainment areas. If a state jurisdictional area does not contain any nonattainment areas, then the highway sanctions would not apply in that state.

IV. Findings of Failure To Submit for Air Agencies That Failed To Make a SIP Submittal in Response to EPA's 2015 SIP Call for Provisions Applying to Excess Emissions During SSM Periods

Based on a review of SIP submittals received and deemed complete as of the date of signature of this action, the EPA finds that 12 air agencies have failed to submit SIP revisions in response to the 2015 SSM SIP Call that were statutorily due no later than November 22, 2016. These affected air agencies are Alabama, Arkansas, California—San Joaquin Valley APCD, District of Columbia, Illinois, Ohio, North Carolina—Forsyth County, Rhode Island, South Dakota, Tennessee—Shelby County, Washington—EFSEC, and Washington—SWCAA.

V. Environmental Justice Considerations

The purpose of this action is to make findings that the named air agencies failed to provide the identified SIP submissions to the EPA that are required under the CAA. As such, this action, in and of itself, does not adversely affect the level of protection provided for human health or the environment. Moreover, it is intended that the actions and deadlines resulting from this notice will promote greater protection for U.S. citizens, including minority, low-income, or indigenous populations, by ensuring that air agencies meet their statutory obligation to develop and submit SIPs to ensure that areas make progress toward reducing excess emissions during periods of SSM.

VI. Statutory and Executive Order Reviews

A. Executive Orders 12866: Regulatory Planning and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is not an Executive Order 13771 regulatory action because this action is not significant under Executive Order 12866.

C. Paperwork Reduction Act (PRA)

This action does not impose an information collection burden under the provisions of the PRA. This final action does not establish any new information

collection requirement apart from what is already required by law. This action relates to the requirement in the CAA for states to submit SIPs in response to findings of substantial inadequacy under section 110(k)(5).

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. The action is a finding that the named air agencies have not made the necessary SIP submission in response to findings of substantial inadequacy under section 110(k)(5) of the CAA.

E. Unfunded Mandates Reform Act of 1995 (UMRA)

This action does not contain any unfunded mandate as described in UMRA 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local or tribal governments, or the private sector.

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. This action finds that several air agencies have failed to submit SIP revisions in response to findings of substantial inadequacy under section 110(k)(5) of the CAA. No tribe is subject to the requirement to submit an implementation plan under the findings of inadequacy relevant to this action. Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of “covered regulatory action” in section 2–202 of the Executive Order. This action is not subject to Executive Order 13045 because it is a finding that several air agencies failed to submit SIP revisions