BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

DYNEGY MIDWEST GENERATION, INC.)
(HAVANA POWER STATION),)
Petitioner,)
v.)) PCB 07-115
) (Permit Appeal – Air)
ILLINOIS ENVIRONMENTAL)
PROTECTION AGENCY,)
Respondent.)

NOTICE OF FILING

To:

John T. Therriault, Assistant Clerk Illinois Pollution Control Board James R. Thompson Center Suite 11-500 100 West Randolph Chicago, Illinois 60601 Sally Carter Division of Legal Counsel Illinois Environmental Protection Agency 1021 North Grand Avenue, East P.O. Box 19276 Springfield, Illinois 62794-9276

PLEASE TAKE NOTICE that we have today filed with the Office of the Clerk of the Pollution Control Board APPEAL OF CONSTRUCTION PERMIT FOR THE INSTALLATION OF BAGHOUSE, SCRUBBER, SORBENT INJECTION SYSTEM, AND BOOSTER FANS, copies of which are herewith served upon you.

(A)

Dated: August 22, 2007

SCHIFF HARDIN LLP Attorneys for Dynegy Midwest Generation, Inc. Sheldon A. Zabel Kathleen C. Bassi Stephen J. Bonebrake Andrew N. Sawula 6600 Sears Tower 233 South Wacker Drive Chicago, Illinois 60606 312-258-5567 FAX: 312-258-5600

CERTIFICATE OF SERVICE

I, the undersigned, certify that on this 22nd day of August, 2007, I have served electronically the attached APPEAL OF CONSTRUCTION PERMIT FOR THE INSTALLATION OF BAGHOUSE, SCRUBBER, SORBENT INJECTION SYSTEM, AND BOOSTER FANS, upon the following persons:

John T. Therriault, Assistant Clerk Illinois Pollution Control Board James R. Thompson Center Suite 11-500 100 West Randolph Chicago, Illinois 60601 Sally Carter Division of Legal Counsel Illinois Environmental Protection Agency 1021 North Grand Avenue, East P.O. Box 19276 Springfield, Illinois 62794-9276

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APPEAL OF CONSTRUCTION PERMIT FOR THE INSTALLATION OF BAGHOUSE, SCRUBBER, SORBENT INJECTION SYSTEM, AND BOOSTER FANS

NOW COMES Petitioner, DYNEGY MIDWEST GENERATION, INC. (HAVANA POWER STATION) ("Petitioner" or "Dynegy"), pursuant to Section 40(a)(1) of the Illinois Environmental Protection Act ("Act") (415 ILCS 5/40(a)(1)) and 35 Ill.Adm.Code § 105.200 *et seq.*, and requests a hearing before the Board to contest the decisions contained in the construction permit¹ issued to Petitioner on April 16, 2007, pursuant to Section 39(a) of the Act (415 ILCS 5/39(a)) and 35 Ill.Adm.Code § 201.142 ("permit" or "construction permit") and attached hereto as Exhibit 1. 35 Ill.Adm.Code §§ 105.210(a) and (b). Petitioner received the construction permit on April 24, 2007. *See* Exhibit 1. On May 16, 2007, Petitioner and the Illinois Environmental Protection Agency ("Agency") timely submitted a Joint Request for Ninety Day Extension of Appeal Period pursuant to Section 40(a)(1) of the Act (415 ILCS 5/40(a)(1)) and 35 Ill.Adm.Code §§ 105.204 and 105.208. The Board granted the 90-day extension on June 7, 2007. Since that time, Dynegy and the Illinois Environmental Protection

¹ Application No. 07010031.

Agency have engaged in discussions regarding Dynegy's concerns with the permit. Those discussions are continuing. The Board's Order (June 7, 2007) notes that the appeal period was extended to August 27, 2007. Pursuant to Sections 39(a) and 40(a)(1) of the Act, 35 Ill.Adm.Code §§ 105.206(a) 105.208(a), and the Board's Order (June 7, 2007), this Petition is timely filed with the Board.

In support of its Petition to appeal Conditions 1.2(b), 1.3(a), 1.3(b), 1.3(c) Note, 1.4(a), 1.4(a) Note, 1.5, 1.6(a)(i), 1.6(a)(i) Note, 1.6(a)(ii), 1.6(a)(ii) Note, 1.6(a)(ii), 1.6(b)(ii), 1.6(b)(ii), 1.6(b)(iii), 1.6(c), 1.7(b)(ii)(B), 1.7(c), 1.7(e)(v), 1.7(e)(viii), 1.7(e) Note, 1.8(a), 1.8(c), 1.8(c) Note, 1.9-1, 1.9-2, 1.9-3, 1.10-1, 1.10-2, and the paragraph following Condition 1.11 of the construction permit issued April 16, 2007, for the Havana Power Station, Petitioner states as follows:

I. <u>BACKGROUND</u> (35 Ill.Adm.Code § 105.304(a))

The Havana Power Station ("Havana" or the "Station"), Agency I.D. No.
 125804AAB, is an electric generating station owned and operated by Dynegy Midwest
 Generation, Inc. The Havana electrical generating units ("EGUs") went online between roughly
 1949 and 1978. The Havana Power Station is located at 15260 North State Route 78, Havana,
 Mason County, Illinois 62644. Mason County is attainment for all National Ambient Air
 Quality Standards ("NAAQS"). The Station can generate approximately 745 gross megawatts of
 electricity. Dynegy employs approximately 81 people at the Havana Station.

2. Dynegy operates one boiler (Unit 6) at Havana that fires coal as its principal fuel. In addition, the boiler fires distillate fuel oil as the startup fuel and for flame stabilization. Certain alternative fuels, such as used oils generated on-site, may be utilized as well. Dynegy also operates eight residual oil-fired boilers at Havana used to produce steam to generate

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electricity. These eight boilers fire distillate fuel oil as startup fuel. Havana also operates a natural gas-fired auxiliary boiler for generating steam for startup of the coal-fired boiler and for heating purposes. Havana operates associated coal handling, coal processing, and ash handling activities. Finally, there are a 1,000-gallon capacity gasoline tank and an 8,000-gallon diesel fuel oil tank located at Havana, to provide fuel for Station vehicles.

3. Havana is a major source subject to the Clean Air Act Permitting Program ("CAAPP") (415 ILCS 5/39.5). The Agency issued a CAAPP permit to Dynegy for Havana on September 29, 2005. Subsequently, on November 2, 2005, Dynegy timely appealed the CAAPP permit for Havana at PCB 06-071. The Board accepted the appeal for hearing on November 17, 2005. On February 16, 2006, the Board found that, pursuant to Section 10-65(b) of the Administrative Procedure Act (5 ILCS 100/10-65(b)) ("APA") and the holding in *Borg-Warner Corp. v. Mauzy*, 427 N.E. 2d 415 (Ill.App.Ct. 1981), the CAAPP permit is stayed, upon appeal, as a matter of law. Order, *Dynegy Midwest Generation, Inc. (Havana Power Station) v. Illinois Environmental Protection Agency*, PCB 06-071 (February 16, 2006), p. 2. Havana is subject to the federal Acid Rain Program at Title IV of the Clean Air Act and has been issued a Phase II Acid Rain Permit.

4. Dynegy entered into a Consent Decree in the matter of the *United States of America, et al. v. Dynegy Midwest Generation, et al.*, Case No. 99-833-MJR in the United States District Court for the Southern District of Illinois (the "Consent Decree"). Applicable provisions in the Consent Decree must be reflected in permits issued to Dynegy. Dynegy's operation of the Havana Power Station must comply with the provisions of the Consent Decree as well as with applicable law and regulations.

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5. Relevant to this appeal, emissions of SO₂ from Unit 6 are currently controlled by limiting the sulfur content of the fuel used for the boilers. PM emissions from Unit 6 are currently controlled by an electrostatic precipitator ("ESP"). A chemical additive system is used to enhance ESP performance.

6. Consistent with the Joint Request for Ninety Day Extension of Appeal Period, Dynegy and the Agency have been engaged in discussions regarding the language included in various conditions in the permit. While Dynegy believes that there has been progress towards addressing its concerns with the permit, those discussions were not completed prior to the deadline for filing this appeal. The Act does not provide for further extension of the time for appeal. Therefore, Dynegy has submitted this appeal, even though it expects to continue its discussions with the Agency regarding this permit during the pendency of this appeal.

II. EFFECTIVENESS OF THE CONSTRUCTION PERMIT AND REQUEST FOR PARTIAL STAY

7. Pursuant to Section 10-65(b) of the APA, 5 ILCS 100/10-65, and the holding in *Borg-Warner Corp*, the conditions of the construction permit issued by the Agency to Havana are not effective by operation of law until after a ruling by the Board on the permit appeal and, in the event of a remand, until the Agency has issued the permit consistent with the Board's order. *See* Order, *Dynegy Midwest Generation, Inc. (Havana Power Station) v. Illinois Environmental Protection Agency*, PCB 06-071 (February 26, 2006) ("Order 2"). Historically, however, the Board has granted partial stays in permit appeals where a petitioner has so requested. *Cf.* Order 2 at p. 8, fn. 3; *Midwest Generation, LLC, Will County Generating Station v. Illinois Environmental Protection Agency*, PCB 06-156 (July 20, 2006) (granted stay of the effectiveness of contested conditions of a construction permit); *Dynegy Midwest Generation, Inc. (Vermilion Power Station), v. Illinois Environmental Protection Agency*, PCB 06-156 (July 20, 2006) (granted stay of the effectiveness of contested conditions of a construction permit); *Dynegy Midwest Generation, Inc. (Vermilion Power Station), v. Illinois Environmental Protection Agency*, PCB 06-194 (October 19, 2006)

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(granted stay "of the portions of the permit Dynegy contests"); *Hartford Working Group v. Illinois Environmental Protection Agency*, PCB 05-74 (November 18, 2004) (granted stay of the effectiveness of Special Condition 2.0 of an air construction permit); *Community Landfill Company and City of Morris v. Illinois Environmental Protection Agency*, PCB 01-48 and 01-49 (Consolidated) (October 19, 2000) (granted stay of effectiveness of challenged conditions for two permits of two parcels of the landfill); *Allied Tube & Conduit Corp. v. Illinois Environmental Protection Agency*, PCB 96-108 (December 7, 1995) (granted stay of the effectiveness of Conditions 4(a), 5(a), and 7(a) of an air permit).

8. Dynegy will suffer irreparable harm and the environment will not receive the benefit of the pollution control facilitated by the baghouse, scrubber, and activated carbon injection ("ACI") systems if Dynegy is not allowed to construct and operate these systems at the Havana Power Station. Dynegy is required by the Consent Decree to construct the baghouse and scrubber for Unit 6. Dynegy's request for stay of the contested language would provide the necessary and appropriate authorizations to install and operate these systems in a manner to protect the environment while allowing Dynegy to exercise its right to an appeal under Section 40(a) of the Act.

9. Dynegy requests in this instance that the Board exercise its inherent discretionary authority to grant a partial stay of the construction permit, staying only those conditions or portions of conditions indicated in Exhibit 2, *i.e.*, Conditions 1.2(b), 1.3(a), 1.3(b), 1.3(c) Note, 1.4(a), 1.4(a) Note, 1.5, 1.6(a), 1.6(b) Note, 1.6(b)(iii), 1.6(c), 1.7(b)(ii)(B), 1.7(c), 1.7(e)(v), 1.7(e)(viii), 1.7(e) Note, 1.8(a), 1.8(c), 1.8 Note, 1.9-1, 1.9-2, 1.9-3, 1.10-1, 1.10-2, and the paragraph following Condition 1.11. In the alternative, if the Board believes that it must stay the entirety of an appealed condition rather than only the portions of the condition where so

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indicated in Exhibit 2, Dynegy requests that the Board stay the entirety of each of the conditions identified in Exhibit 2.

III. <u>ISSUES ON APPEAL</u> (35 Ill.Adm.Code §§ 105.210(c))

10. The issues raised in the conditions appealed herein fall into several categories. One category addresses the manner in which the Agency has addressed the requirements of the Consent Decree applicable to Dynegy. A second category of issues concerns the Agency's treatment of the mercury rule adopted by the Board at 35 Ill.Adm.Code Part 225. Additionally, the Agency has included unnecessary conditions and "notes" in the permit that should be deleted. Dynegy also appeals provisions that were appealed in the CAAPP appeal, PCB 06-071, or are otherwise CAAPP-related. Dynegy objects to certain testing, recordkeeping, and reporting provisions in the permit and has other general objections.

A. The Agency Has Inappropriately Referenced and/or Interpreted the Consent Decree – Conditions 1.2(b), 1.4(a), 1.6(a)(i) Note, 1.6(a)(ii) Note, 1.6(a)(iii), 1.6(b)(ii) Note, 1.6(b)(iii), 1.9-2(a)(i), 1.9-2(a)(ii), 1.9-2(b), 1.9-3(a), and 1.10-2(a).

11. Applicable provisions in the Consent Decree must be reflected in permits issued to Dynegy. The Agency has referred to or paraphrased various provisions of the Consent Decree in the construction permit. Dynegy objects to the way in which the Agency has incorporated the Consent Decree. This was also an issue raised in the appeal of the CAAPP permit issued for the Havana Power Station, docketed at PCB 06-071. Additionally, some of the issues appealed in PCB 06-071 relative to interpretations of the Consent Decree reappear in this permit and must be appealed here to preserve Dynegy's rights to appeal the CAAPP permit.

Specifically, Dynegy objects to the Agency providing interpretations of the
 Consent Decree in either conditions or "notes" in any permit, including this construction permit.
 The U.S. Environmental Protection Agency ("USEPA") is currently the entity with whom

Dynegy interfaces regarding requirements in the Consent Decree. USEPA's interpretations of provisions in the Consent Decree prevail subject to the dispute resolution provisions of the Consent Decree, and the insertion of the Agency's interpretations adds confusion and unnecessary complexity to interpreting the Consent Decree. Despite inclusion of language in Condition 1.1(d) to the effect that where this construction permit and the Consent Decree differ, the Consent Decree prevails, the Agency's interpretations, nevertheless, present the potential for inconsistent interpretations of Consent Decree provisions as the Consent Decree is implemented through permits issued by the Agency. The dispute resolution provisions of the Consent Decree do not apply to the Agency's interpretations. As a result, Dynegy could be subjected to at least two and as many as five different governmental entities² interpreting the Consent Decree.

13. As referenced above, Condition 1.1(d) states that if there are inconsistencies between the construction permit and the Consent Decree, the Consent Decree will prevail. Presumably, this statement would address a situation where the Agency included, for example, one emissions limitation in the permit and referenced a paragraph in the Consent Decree, but that paragraph in the Consent Decree actually called for a different emissions limitation. Dynegy agrees that in such a situation, the Consent Decree should prevail. However, the statement in the permit does not address inconsistent interpretations of the Consent Decree or reduce Dynegy's exposure to enforcement of the construction permit's limitations independent of the language in the Consent Decree. For these reasons, a number of the conditions in the construction permit are appealed herein because of the way in which the Agency has referenced or paraphrased the Consent Decree, and Dynegy requests that the Board order the Agency to merely reference the

² USEPA, the Agency, the Illinois Attorney General as the Agency's representative in an enforcement matter, the federal District Court where the Consent Decree was entered, and the Board who would adjudicate an enforcement matter.

appropriate paragraph in the Consent Decree rather than add an explanation or description of the provisions of the paragraph, which *ipso facto* is the Agency's interpretation of the meaning of referenced paragraph.

14. Specifically, Conditions 1.2(b), 1.6(a)(i) Note, 1.6(a)(ii) Note, and 1.6(b)(ii) Note are such interpretations. Their inclusion is arbitrary and capricious, and these conditions should be deleted from the permit. Dynegy requests that the Board stay the effectiveness of these conditions and Notes, as set forth in Exhibit 2, during the pendency of this appeal.

15. Condition 1.4(a) sets forth an SO₂ emissions limitation of 0.100 lb/mmBtu and references the Consent Decree as the source for this limitation. However, the limitation is incomplete. The Consent Decree requires that the SO₂ limitation be measured on a 30-day rolling average basis. The Agency's decision to exclude the averaging time is arbitrary and capricious, and Dynegy requests that the Board order the Agency to add the limitation to the permit. Dynegy requests that the Board stay Condition 1.4(a), as set forth in Exhibit 2, during the pendency of this appeal. The emissions limitation as stated in the Consent Decree would apply.

16. Condition 1.6(a)(iii) requires that Dynegy "operate and maintain the . . . boiler . . . and associated PM control equipment in accordance with the PM control plan maintained by the Permittee pursuant to Condition 1.9-2(b)(i)(A)." Condition 1.9-2(b)(i)(A) references Condition 1.6(a)(i), which is appealed herein and which also contains a Note, appealed herein as well, that Dynegy believes is the source of a number of issues raised in this appeal. The Agency apparently interprets the Consent Decree to require a PM Control Plan, referred to in Condition 1.9-2(b)(i)(A) when referring back to Condition 1.6(a). Condition 1.9-3(a) requires recordkeeping related to the PM Control Plan. The Consent Decree does not, in fact, require

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such a PM Control Plan. Further, there is no other applicable requirement that Dynegy develop a PM Control Plan. Therefore, the requirement in Condition 1.6(a)(iii) that Dynegy operate the boiler and PM control equipment pursuant to this PM Control Plan, the requirement in Conditions 1.9-2(b) and 1.9-3(a) that it keep records related to the PM Control Plan and submit them and correspondence with USEPA regarding the PM Control Plan, and the related reporting requirements of Condition 1.10-2(a) are beyond the scope of the Agency's authority to require, are arbitrary and capricious, and should be deleted from the permit. Additionally, Condition 1.9-2(a)(i) relies upon Condition 1.6(a) as the authority for its inclusion.³ Dynegy requests that the Board order the Agency to delete Conditions 1.6(a)(iii), 1.9-2(a)(i), 1.9-2(b), 1.9-3(a), and 1.10-2(a) from the permit. Further, Dynegy requests that the Board stay the effectiveness of Conditions 1.6(a)(iii), 1.9-2(a)(i), 1.9-2(b) 1.9-3(a), and 1.10-2(a), as set forth in Exhibit 2, during the pendency of this appeal.

17. The Agency also apparently interprets the Consent Decree to require an SO_2 Control Plan. Again, there is no requirement in the Consent Decree or any other applicable requirement for an SO_2 Control Plan. Condition 1.6(b)(iii) requires operation and maintenance of the SO_2 control system pursuant to this SO_2 Control Plan. This condition also references Condition 1.9-2(b)(iii)(A), which does not exist in this permit. Condition 1.9-2(a)(ii)(A) refers to Condition 1.6(b), which contains the requirement for the SO_2 Control Plan and is appealed herein. Conditions 1.6(b)(iii) and 1.9-2(a)(ii) exceed the scope of the Agency's authority to require, are arbitrary and capricious, and should be deleted from the permit. Dynegy requests that the Board stay the effectiveness of Conditions 1.6(b)(iii) and 1.9-2(a)(ii), as set forth in Exhibit 2, during the pendency of this appeal.

³ Conditions that rely on conditions that are being appealed will also be appealed herein.

B. The Agency Has Inappropriately Included Provisions Whose Only Purpose Is to Implement the Mercury Rule – Conditions 1.3(a)(ii), 1.8(a), 1.8(c), 1.9-1, 1.9-2(a)(iii)(A), and 1.9-3(b).

On March 14, 2006, the Agency submitted a proposed rulemaking to the Board, 18. "In the Matter Of: Proposed New 35 Ill.Adm.Code 225 Control of Emissions from Large Combustion Sources," docketed at R06-25 ("the mercury rule"). The Board adopted this rule on December 21, 2006. The mercury rule includes some provisions in Subpart A of Part 225 and all of Subpart B of Part 225. The initial compliance date for the mercury rule is July 1, 2009. 35 Ill.Adm.Code § 225.230(a)(1). If a company decides to opt in to the Multi-Pollutant Standard ("MPS") provisions of Section 225.233, however, the initial compliance date for the mercury emissions limitation is January 1, 2015. 35 Ill.Adm.Code § 225.233(d)(1). A company is not required to notify the Agency of its intention to opt in prior to December 31, 2007. 35 Ill.Adm.Code § 225.233(b). If a company decides to opt in to the Multi-Pollutant Standard ("MPS") set forth in Section 225.233, it must install and operate ACI systems on its EGUs by July 1, 2009, or December 31, 2009, as applicable. 35 Ill.Adm.Code § 225.233(c)(1)(A). Otherwise, the mercury rule does not require ACI systems. The mercury rule requires that Dynegy submit applications to revise its CAAPP permits to implement the mercury rule by December 31, 2008. 35 Ill.Adm.Code § 225.220(a)(2)(A).

19. In the meantime, Dynegy must take the actions necessary for it to comply with the emissions limitations by the applicable deadlines, including submittal of applications for construction permits. The permit appealed here falls into this bin. It does not comprise a notification to the Agency that Dynegy necessarily intends to opt in to the MPS, and it does not trigger any of the requirements of the mercury rule or the MPS prior to the dates included in the rules. Yet the Agency has imposed requirements in the construction permit that go far beyond

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Dynegy's simple request to install and operate an ACI system. Some of these requirements imply that the Agency intends to implement the mercury rule at the Havana Power Station through this permit.

20. Conditions 1.3(a)(ii), 1.8(a), 1.8(c), 1.9-1, 1.9-2(a)(iii)(A), and 1.9-3(b) do not reflect any applicable requirements that come within the scope of what Dynegy has requested with respect to this permit absent such a statement. Inclusion of these conditions is arbitrary and capricious and exceeds the scope of the Agency's authority. These conditions should be deleted from the permit.

21. Specifically, Condition 1.3(a)(ii) requires compliance with the mercury emissions limitations of Part 225; Condition 1.8(a) requires continuous monitoring equipment for the ACI system; Condition 1.8(c) requires compliance with "all applicable requirements of 35 IAC Part 225"; Condition 1.9-1 requires Dynegy to maintain records relative to the mercury content of the coal supply; Condition 1.9-2(a)(iii)(A) requires records regarding mercury emissions; and Condition 1.9-3(b) requires Dynegy to comply with "all applicable recordkeeping requirements ... related to control of mercury emissions from the affected boiler." There are no applicable requirements relevant to this permit that authorize the Agency to include these conditions in this permit.

22. A purpose of this permit is to authorize the construction and operation of the ACI system and the related storage and handling system. While use of these systems will allow Dynegy to reduce its mercury emissions, use of an ACI system is not required by the mercury rule unless Dynegy chooses to opt in to the MPS. The applicability of the MPS is dependent upon Dynegy formally notifying the Agency that it intends to comply with the mercury limits pursuant to the MPS, which it has not done.

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23. The installation and operation of the ACI system does not, in and of itself, require the imposition of mercury limitations. Therefore, the inclusion of mercury limitations in Condition 1.3(a)(ii) is inappropriate and arbitrary and capricious and should be deleted from the permit. Dynegy requests that Condition 1.3(a)(ii) be stayed, as set forth in Exhibit 2, during the pendency of this appeal.

24. Condition 1.8(a) requires continuous monitoring of the sorbent injection system, "i.e., rate of injection of sorbent." First, if the Agency's intent is that Condition 1.8(a) requires continuous monitoring of the rate of injection of sorbent, then rather than stating that in an "*i.e.*" phrase, the condition should just state that the Permittee must continuously monitor the injection rate of sorbent. Dynegy believes, however, that the requirement should be qualified by the phrase, "when sorbent is being injected." The word *continuous* means "marked by uninterrupted extension in space, time, or sequence." Merriam-Webster's Collegiate Dictionary (10th ed.) Dynegy should not be required to monitor the injection rate of sorbent when it is not being injected. Second and more importantly, sorbent injection is required <u>only</u> if Dynegy chooses to opt in to the MPS. As discussed above, Dynegy has not yet formally notified the Agency of its intentions regarding the MPS. Therefore, a requirement for continuous monitoring of the injection rate of sorbent in this permit is premature absent a qualifying phrase in the condition that ties the monitoring to the compliance requirements of the MPS should Dynegy choose to opt in.

25. For these reasons, Condition 1.8(a) is arbitrary and capricious and beyond the scope of the Agency's authority to require. Dynegy requests that the Board order the Agency either to delete the condition from the permit or to modify the condition to make it conform with

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applicable requirements. Dynegy requests that the Board stay the effectiveness of Condition 1.8(a), as set forth in Exhibit 2, during the pendency of this appeal.

26. Likewise, Condition 1.8(c) is an expansion of the scope of a simple construction permit authorizing the installation of an ACI system. From that request, the Agency leapt to requiring that Dynegy comply with all applicable requirements of Part 225 related to monitoring mercury. The construction and operation of an ACI system do not themselves subject a source to the Part 225 mercury emissions monitoring requirements. Rather, that requirement is a function of implementation of the mercury rule, which the Agency has not identified as a purpose of this permit. Condition 1.8(c) is inappropriate and arbitrary and capricious and should be deleted from the permit. Dynegy requests that the Board stay the effectiveness of Condition 1.8(c), as set forth in Exhibit 2, during the pendency of this appeal.

27. Condition 1.9-1 exceeds the Agency's authority. Condition 1.9-1 requires the Permittee to maintain records regarding the amounts of mercury in its coal supply. The broad, general requirement stated in Condition 1.9-1 for Dynegy to sample its coal supply for mercury content and keep records thereof is inappropriate and arbitrary and capricious because measuring mercury in the coal supply is required under the mercury rule <u>only</u> if the Permittee chooses to demonstrate compliance pursuant to Section 225.230(a)(1)(B), the requirement for a 90% reduction from input mercury. If the Permittee chooses to comply with Section 225.230(a)(1)(A), on the other hand, there is no requirement in the mercury rule that the Permittee monitor the mercury content of its coal supply.

28. Condition 1.9-1 is arbitrary and capricious, exceeds the scope of the Agency's authority as monitoring the coal supply has no relationship to constructing and installing an ACI system, exceeds the scope of the Agency's authority under Section 225.230(a)(1), and should be

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deleted from the permit. Dynegy requests that the Board stay the effectiveness of Condition 1.9-1, as set forth in Exhibit 2, during the pendency of this appeal.

29. Condition 1.9-2(a)(iii)(A) requires Dynegy to maintain records regarding the sorbent being used, the settings for sorbent injection rate, and each period of time when both the boiler and sorbent injection were being used. Additionally, Condition 1.9-2(a)(iii)(A) requires Dynegy to document implementation of operating procedures as required by Condition 1.6(c).

30. As discussed above, the use of sorbent is required by the mercury rule only if Dynegy opts in to the MPS, and notification of its intentions in that regard are not due until the end of this year. To the extent that the MPS of the mercury rule is the applicable requirement underlying this condition, the provisions of this condition are premature absent qualifying language tying the requirements to the MPS. Dynegy understands and expects that the Agency would require records and reporting of sorbent use as they relate to emissions of PM. However, this condition is more specific than that by requiring the brand of sorbent used, which is a function of the MPS.

31. Dynegy does not understand why the Agency requires such a level of detail as the <u>settings</u> for the sorbent injection rate. The MPS requires a minimum sorbent injection rate. <u>Requiring</u> Dynegy to report the settings on its ACI system associated with the sorbent injection rate is micro-management. On the other hand, if Dynegy establishes the settings on its ACI system as its means of identifying the sorbent injection rate, *i.e.*, the settings are a surrogate for the rate, then recording and reporting the settings may be appropriate. However, the condition does not provide for the development of such a surrogate; rather, it requires the settings. This exceeds the scope of the Agency's authority and is arbitrary and capricious.

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32. Condition 1.9-2(a)(iii)(A) refers to Condition 1.6(c) regarding certain conditions to be implemented regarding sorbent injection. However, Condition 1.6(c) addresses the testing and the submittal of test plans and does not appear to correlate with Condition 1.9-2(a)(iii)(A).

33. For these reasons, Condition 1.9-2(a)(iii)(A) is arbitrary and capricious and beyond the scope of the Agency's authority to require. Dynegy requests that the Board order the Agency to delete Condition 1.9-2(a)(iii)(A) from the permit. At the least, Dynegy requests that the Board order the Agency to modify Condition 1.9-2(a)(iii)(A) in such a way as to limit its applicability to Dynegy's participation in the MPS and to require recordkeeping of the sorbent injection rate. Dynegy requests that the Board stay the effectiveness of Condition 1.9-2(a)(iii)(A) during the pendency of this appeal.

34. Condition 1.9-3(b)(i) requires maintenance of "all applicable recordkeeping required by 35 IAC Part 225 related to control of mercury emissions. . . ." As discussed above, construction and installation of an ACI system do not trigger a requirement to comply with the mercury rule. Moreover, there is no qualification included in this condition that reflects the compliance dates of the mercury rule. Rather, the recordkeeping requirements of Subpart B are required, according to this condition, immediately. Condition 1.9-3(b)(i) is arbitrary and capricious and should be deleted from the permit. Dynegy requests that the Board stay Condition 1.9-3(b)(i), as set forth in Exhibit 2, during the pendency of this appeal.

35. Condition 1.9-3(b)(ii) is particularly unacceptable. Here the Agency requires the Permittee to "maintain records of emission data for mercury collected for the affected boilers" "[d]uring the period <u>before</u> the Permittee is required to conduct monitoring for mercury emissions . . . pursuant to 35 IAC Part 225." Condition 1.9-3(b)(ii). (Emphasis added.) There is <u>no</u> authority for the Agency to require such monitoring and recordkeeping. Requiring such

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information through a permit is inappropriate. There is no provision in the Act or any of the applicable regulations that authorizes the Agency to include conditions in permits merely to aid the Agency in gathering data not otherwise required. Condition 1.9-3(b)(ii) is arbitrary and capricious, not based upon any applicable requirements, and beyond the scope of the Agency's authority to require. It should be deleted from the permit, and Dynegy requests that the Board stay the effectiveness of Condition 1.9-3(b)(ii) , as set forth in Exhibit 2, during the pendency of this appeal.

C. The Agency Has Included Unnecessary Conditions and Notes in the Permit – Conditions 1.3(a)(i), 1.3(b), 1.3(c) Note, 1.4(a) Note, 1.5, 1.7(e) Note, 1.8(c) Note, 1.9-1 Note, 1.9-2(b) Note, 1.10-1(b) Note, 1.10-2 Note, and Paragraph Following Condition 1.11.

36. Condition 1.1(b)(i) states, in part, that "the terms and conditions of the existing permits will continue to govern emissions and operation of the boiler except as specifically indicated." The Agency then included conditions and "notes" throughout the permit either repeating already-applicable provisions covered in other permits and not superseded by this construction permit or reminding the reader that conditions in other permits are not affected by this permit. A second set of "notes" and a paragraph towards the end of the permit make obvious statements that do not add substance to the permit. This surplusage is arbitrary and capricious and should be deleted from the permit.

37. Specifically, Conditions 1.3(a)(i) and 1.3(b) address the applicability of New Source Performance Standards ("NSPS") and 35 Ill.Adm.Code Chapter B, Chapter I, Subchapter 3, respectively, facts that are already addressed by the general statement of Condition 1.1(b)(i). Condition 1.7(e) Note addresses testing requirements in other permits. Condition 1.8(c) Note addresses monitoring requirements in existing permits. Conditions 1.9-1 Note and 1.9-2(b) Note address recordkeeping requirements in other permits. Condition 1.10-1(b) Note addresses

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reporting requirements in other permits; however, Condition 1.10-1 requires deviation reporting, which Dynegy is appealing elsewhere in this Petition. Condition 1.10-2 Note addresses quarterly reporting; however, again, Dynegy is appealing this condition generally elsewhere in this Petition.

38. Condition 1.3(c) Note states that the PM emission rate for the boiler under the Consent Decree is more stringent than required by the NSPS or the state regulations. Condition 1.4(a) Note similarly addresses the SO₂ emission rate. Condition 1.5 describes the Compliance Assurance Monitoring ("CAM") requirement of 40 CFR § 64.5(a)(2) but does not require CAM, nor do the activities covered by the construction permit trigger the applicability of CAM. The condition appears to be included merely as informational or in error. The paragraph following Condition 1.11, beginning, "Please note that this permit does not address requirements of the Consent Decree for emissions of nitrogen oxides," is unnecessary and should be deleted from the permit. The paragraph suggests that the Agency believes that all construction permits should address every Consent Decree requirement applicable to a power station. Clearly this permit does not address nitrogen oxides ("NOX"); NOx was not addressed in the application and there are no NOx control devices that are included within the scope of the permit.

39. For the reasons set forth above, Dynegy requests that the Board order the Agency to delete Conditions 1.3(a)(i), 1.3(b), 1.3(c) Note, 1.4(a) Note, 1.5, 1.7(e) Note, 1.8(c) Note, 1.9-1 Note, 1.9-2(b) Note, 1.10-1(b) Note, 1.10-2 Note, and the paragraph following Condition 1.11 from the permit as unnecessary to the permit and that the Board stay the effectiveness of these provisions, as set forth in Exhibit 2, during the pendency of this appeal.

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D. The Agency Has Included Conditions That Either Were Appealed in PCB 06-071 or Are CAAPP Requirements and Not Part 201 Requirements – Conditions 1.7(b)(ii)(B), 1.7(e)(v), 1.7(e)(viii), and 1.10-1.

40. Condition 1.7(b)(ii)(B) requires PM testing to include testing for condensables pursuant to USEPA Method 202, and Conditions 1.7(e)(v) and 1.7(e)(viii) require reporting a number of other data during PM testing. Dynegy appealed these same requirements in its appeal of the CAAPP permit issued to the Havana Power Station. See Appeal of CAAPP Permit, ¶ 79-84 and 119, respectively, PCB 06-071 (November 3, 2005). The same reasons that Dynegy believes that Method 202 testing is not applicable to the Havana Power Station in its CAAPP Appeal apply to this construction permit. There is nothing in the provisions of 35 Ill.Adm.Code Part 212 that would alter the applicability of Method 202 to Havana because of the construction permit. Likewise, the same reasons that Dynegy objected to the inclusion of the requirement to report other data during PM testing continue to apply. The Agency's inclusion of Conditions 1.7(b)(ii)(B), 1.7(e)(v), and 1.7(e)(viii) undermines Dynegy's right to a hearing on the merits of this issue in PCB 06-071 and the Board's decision in Order 2 staying the effectiveness of the CAAPP permit. For these reasons, inclusion of Conditions 1.7(b)(ii)(B), 1.7(e)(v), and 1.7(e)(viii) is beyond the scope of the Agency's authority to require and arbitrary and capricious. Dynegy requests that the Board order the Agency to delete Conditions 1.7(b)(ii)(B), 1.7(e)(v)and 1.7(e)(viii) from the construction permit and that it stay the effectiveness of Conditions 1.7(b)(ii)(B), 1.7(e)(v), and 1.7(e)(viii), as set forth in Exhibit 2, during the pendency of this appeal.

41. Condition 1.10-1 requires deviation reporting. Deviation reporting is a function of CAAPP permitting. *See* 415 ILCS 5/39.5(7)(f)(ii). It is not a requirement found in the permitting requirements of Section 39 of the Act (415 ILCS 5/39) or the construction permitting

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regulations of 35 Ill.Adm.Code Part 201, the provisions of the Act and regulations under which this permit was issued. While the pertinent provisions of this construction permit will eventually be rolled in to Havana's CAAPP permit, the construction permitting rules do not provide for deviation reporting prior to inclusion of the pertinent provisions in the CAAPP permit. Although this construction permit will, indeed, serve as an operating permit for the pollution control systems authorized by the permit until such time as the pertinent provisions are transferred to the CAAPP permit, this construction permit is not a CAAPP permit. It is not subject to any of the CAAPP requirements for permitting. Dynegy acknowledges that some of the permitting procedures applicable under Part 201 may be the same or similar to some of the CAAPP permitting procedures. However, such similarities or overlaps do not imply that Part 201 permitting is the same as CAAPP permitting in terms of the types of requirements that can be included in the Part 201 permits.

42. The Agency has exceeded the scope of its authority under the Act and the applicable regulations by requiring deviation reporting in this construction permit. For these reasons, Dynegy requests that the Board order the Agency to delete Condition 1.10-1 from the permit and that it stay the effectiveness of Condition 1.10-1, as set forth in Exhibit 2, during the pendency of this appeal.

E. The Agency Has Inappropriately Included Certain Testing Provisions – Conditions 1.7(c), 1.7(e)(v), and 1.7(e)(viii).

43. In addition to the testing requirements of Conditions 1.7(b)(ii)(B), 1.7(e)(v), and 1.7(e)(viii) discussed above in Section D of this petition, the Agency has included other objectionable testing provisions.

44. Condition 1.7(c) requires the Permittee to "submit [a] test plan at least 60 days prior to the actual date of testing." This in itself is not objectionable. Dynegy's issue with the

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condition is that it does not recognize the provisions of 35 Ill.Adm.Code § 283.220(d).

Specifically, Section 283.220(d) states as follows:

Notwithstanding subsections (a), (b), and (c) above, a test plan need not be submitted under the following circumstances:

- 1) Where the source intends to utilize a test plan previously submitted to the Agency. However, the source must submit a notice containing the following:
 - A) The purpose of the test;
 - B) Date the previously submitted test plan was submitted to the Agency; and
 - C) A statement that the source is relying on a previously submitted test plan.
- 2) Where the source intends to use a standard test method or procedure. However, the source must submit a notice containing the following:
 - A) The purpose of the test; and
 - B) The standard test method or procedure to be used.

35 Ill.Adm.Code § 283.220(d). Rather, the Agency, through this condition, is requiring Dynegy to submit a test plan every time that it tests contrary to the provisions of Section 283.220(d). No other reference to Part 283 in the condition suggests an interpretation to the contrary.

45. For these reasons, Dynegy requests that the Board order the Agency to amend the requirements of Condition 1.7(c) to reflect the provisions of 35 Ill.Adm.Code § 283.220(d) and to stay Condition 1.7(c), as set forth in Exhibit 2, during the pendency of this appeal.

46. In addition to Dynegy's objection to the inclusion of Conditions 1.7(e)(v) and 1.7(e)(viii) as discussed above in Section D, Dynegy objects to the provisions of these conditions specifically relative to this construction permit. Condition 1.7(e)(v) requires Dynegy to provide various operating data during PM testing. Condition 1.7(e)(viii) requires that Dynegy provide

SOx, NOx, O₂ or CO₂, and opacity data during PM testing. Operation of an electric generating station depends upon many variables – ambient air temperature, cooling water supply temperature, fuel supply, equipment variations, and so forth. Using operational and other emissions data during PM testing as some type of monitoring device or parametric compliance data, which appears to be the Agency's intent by including this provision in the permit, would be inappropriate. For these reasons, Conditions 1.7(e)(v) and 1.7(e)(viii) is arbitrary and capricious and should be deleted from the Permit. Dynegy requests that the Board stay the effectiveness of Conditions 1.7(e)(v) and 1.7(e)(viii), as set forth in Exhibit 2, during the pendency of this appeal.

F. Dynegy Objects to Other Conditions of the Permit – Conditions 1.6(a)(i), 1.6(a)(ii), 1.6(b)(i), 1.6(b)(ii), 1.6(c), and 1.9-2.

47. A number of conditions in the permit are ambiguous or are not based upon the application that Dynegy submitted for this permit. These conditions should be amended to provide necessary clarity or should be deleted.

48. Conditions 1.6(a)(i) and 1.6(a)(ii) require Dynegy to comply with the Consent Decree regarding the ESP on Unit 6. Inclusion of provisions covering the ESP is inappropriate, because the ESP is outside of the scope of the projects covered by this permit. Dynegy did not include any changes to the ESP in its application. The Agency cannot use the addition of a PM control device, the baghouse, or the addition of the ACI system to address requirements of the Consent Decree applicable to the ESP. The Consent Decree required Dynegy to submit an application to the Agency to amend its CAAPP permit to incorporate certain provisions of the Consent Decree. Dynegy has complied with that requirement. That application, however, cannot be used to insert Consent Decree required to the scope of Dynegy's application for this construction permit into the construction permit. For these reasons, Dynegy requests that the Board order the Agency to delete Conditions 1.6(a)(i) and 1.6(a)(ii) from this

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permit and that the Board stay Conditions 1.6(a)(i) and 1.6(a)(ii), as set forth in Exhibit 2, during the pendency of this appeal.

49. Condition 1.6(b)(i) is written in the negative. It says that Dynegy cannot operate Unit 6 "no later than December 31, 2012," unless Dynegy has complied with Paragraph 66 of the Consent Decree. The condition is very awkward. Dynegy suggests that the condition be rewritten as follows:

No later than December 31, 2012, the Permittee shall operate the affected boiler and Unit 6 in accordance with the requirements of Paragraph 66 of the Decree.

Although Dynegy hereby appeals Condition 1.6(b)(i) and requests that the Board order the Agency to amend the language as suggested above, Dynegy does not request that the Board stay Condition 1.6(b)(i) during the pendency of this appeal.

50. Condition 1.6(b)(ii) fails to include the date by which Dynegy must operate and maintain the SO₂ system in a certain manner, *i.e.*, December 31, 2012. Although the condition references the Consent Decree, the language of the condition makes it applicable immediately, even though the provisions of the Consent Decree are different. Dynegy requests that the Board order the Agency to insert the applicable date in this condition. Dynegy also requests that the Board stay this condition, as set forth in Exhibit 2.

51. Condition 1.6(c) prohibits Dynegy from including a bypass duct that would enable Dynegy to bypass the baghouse authorized by this permit. Dynegy's application to construct the baghouse at the Havana Power Station did not include a provision for there to be a bypass duct in the baghouse system. Dynegy understands that if it decides a bypass duct is appropriate during construction or later, it will need to either seek an amendment to this construction permit or obtain a new construction permit, respectively, at that time. There is no

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basis for the Agency to include this prohibition in this permit. It is totally beyond the scope of the application. For these reasons, Dynegy requests that the Board order the Agency to delete Condition 1.6(c) from this permit and that the Board stay the effectiveness of Condition 1.6(c), as set forth in Exhibit 2, during the pendency of this appeal.

52. Dynegy objects to the requirement that it maintain logs for the baghouse, scrubber and sorbent injection system at Condition 1.9-2. Dynegy does not object to recordkeeping. It objects to the requirement that it develop and maintain "logs," *per se*, and believes that the recordkeeping systems that it has already developed and that can be readily adapted to include these new pollution control systems meet the Agency's purposes and should suffice (*e.g.*, electronic recordkeeping). Therefore, Dynegy requests that the Board order the Agency to delete references to logs in Condition 1.9-2 and that it stay the effectiveness of Condition 1.9-2, as set forth in Exhibit 2, during the pendency of this appeal.

WHEREFORE, for the reasons set forth above, Dynegy appeals Conditions 1.2(b), 1.3(a), 1.3(b), 1.3(c) Note, 1.4(a), 1.4(a) Note, 1.5, 1.6(a)(i) Note, 1.6(a)(ii), 1.6(a)(ii) Note, 1.6(a)(iii), 1.6(b)(i), 1.6(b)(ii), 1.6(b)(ii) Note, 1.6(b)(iii), 1.6(c), 1.7(b)(ii)(B), 1.7(c), 1.7(e)(viii), 1.7(e) Note, 1.8(a), 1.8(c), 1.8(c) Note, 1.9-1, 1.9-2, 1.9-3, 1.10-1, 1.10-2, and the paragraph following Condition 1.11 of the construction permit issued April 16, 2007, for the Havana Power Station. Additionally, Dynegy requests that the Board stay all or the portions of the Conditions appealed above <u>except for</u> Condition 1.6(b)(i), as set forth in Exhibit 2. Dynegy will extend its current practices of recordkeeping and reporting to the new pollution control systems and will, of

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course, comply with all requirements of the Consent Decree applicable to these new pollution control systems during the pendency of this appeal.

Respectfully submitted,

DYNEGY MIDWEST GENERATION, INC. (HAVANA POWER STATION)

by:

Dated: August 22, 2007

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Illinois Environmental Protection Agency

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ROD R. BLAGOJEVICH, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Dynegy Midwest Generation, Inc. Attn: Rick Diericx 2828 North Monroe Street Decatur, Illinois 62526

Application No.: 07010031I.D. No.: 125804AABApplicant's Designation:Date Received: January 17, 2007Subject: Baghouse, Scrubber and Sorbent Injection Systems for Unit 6Date Issued: April 16, 2007Location: Havana Power Plant, 15260 N. State Route 78, Havana, Mason County

Permit is hereby granted to the above-designated Permittee to CONSTRUCT equipment consisting of a baghouse, scrubber, and sorbent injection system for the Unit 6 Boiler and associated installation of booster fans, as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1.1 Introduction
 - a. This Permit authorizes construction of a baghouse system (Baghouses A and B), scrubber system (Scrubbers A and B), and sorbent injection system to supplement the existing emission control systems on the existing Unit 6 boiler (also known as Boiler 9). The new baghouse system, scrubber system, and sorbent injection system would further process the flue gas from this existing coal-fired boiler, which is equipped with a particulate agglomerator, electrostatic precipitator (ESP), and selective catalytic reduction (SCR) system. This permit also authorizes installation of booster fans on the boiler to compensate for the additional pressure drop from these new control systems.
 - b. i. This permit is issued based on this project being an emissions control project, whose purpose and effect will be to reduce emissions of sulfur dioxide (SO₂), particulate matter (PM), and mercury from the existing boiler and which will not increase emissions of other PSD pollutants. As such, the terms and conditions of the existing permits will continue to govern emissions and operation of the boiler except as specifically indicated.
 - ii. This permit is issued based on the receiving, storage and handling of limestone and halogenated activated carbon for the new control systems qualifying as insignificant activities, with annual emissions of PM in the absence of control equipment that would be no more than 0.44 tons, so that this activity need not be addressed by this permit. This does affect the Permittee's obligation to comply with



all applicable requirements that apply to the receiving, storage and handling of these materials.

- c. This permit does not authorize any modifications to the existing boiler or generating unit, which would increase their capacity or potential emissions.
- d. This permit does not affect requirements for the affected boiler established by the Consent Decree in United States of America and the State of Illinois, American Bottom Conservancy, Health and Environmental Justice-St. Louis, Inc., Illinois Stewardship Alliance, and Prairie Rivers Network, v. Illinois Power Company and Dynegy Midwest Generation Inc., Civil Action No. 99-833-MJR, U.S. District Court, Southern District of Illinois (Decree), certain provisions of which are referenced by this permit. In addition, as the provisions of the Decree are referenced in certain conditions of this permit, in the event of inconsistency between a permit condition and the provision of the Decree or if a provision of the Decree is revised, the actual provision of the Decree shall govern.
- 1.2 Applicability Provisions
 - a. The "affected boiler" for the purpose of these unit-specific conditions is the existing Unit 6 boiler after the initial startup of the new emissions control systems, as described in Condition 1.1.
 - b. For purposes of certain conditions related to the Decree, the affected boiler is also part of a "Unit" as defined by Paragraph 50 of the Decree, which defines a "Unit" to mean collectively, the boiler that produce steam for the steam turbine (i.e., the affected boiler), the coal pulverizer, stationary equipment that feeds coal to the boiler, the steam turbine, the generator, the equipment necessary to operate the generator, steam turbine and boiler, and all ancillary equipment, including pollution control equipment.
- 1.3 Applicable Emission Standards for the Affected Boiler
 - a. i. The affected boiler shall comply with applicable emission standards under the federal New Source Performance Standards (NSPS) for Fossil Fuel Fired Steam Generators, 40 CFR 60 Subpart D, as addressed in existing permits for the affected boiler.
 - ii. The affected boiler shall comply with applicable emission standards and requirements related to mercury emission pursuant to 35 IAC Part 225, by the applicable dates specified by theses rules.
 - b. The affected boiler shall comply with applicable emission standards under Title 35, Subtitle B, Chapter I, Subchapter c of the Illinois Administrative Code, as addressed in existing permits for the affected boiler.

c. The PM emission rate of the affected boiler shall not be greater than the limit specified in Paragraph 86 of the Decree, i.e., 0.030 lb/mmBtu. Emission testing conducted to determine compliance with this limit shall use methods and procedures as specified in Paragraph 90 of the Decree

Note: The PM emission rate for the affected boiler pursuant to the Decree is more stringent than the applicable NSPS and state standards for PM.

- 1.4 Future Applicable Emission Rate under the Consent Decree
 - a. The SO₂ emission rate of affected boiler shall be no greater than the limit specified in Paragraph 66 of the Decree, i.e., 0.100 lb/mmBtu, by the date specified in Paragraph 66, i.e., no later than December 31, 2012. Emission testing conducted to determine compliance with this limit shall use methods and procedures as specified in Paragraph 82 of the Decree.

Note: The SO_2 emission rate for the affected boiler pursuant to the Decree, when it takes effect, will be more stringent than the current applicable federal NSPS standards of 1.2 lb/mmBtu.

- b. The PM emission rate of the affected boiler shall be no greater than the limit specified in Paragraph 85 of the Decree, i.e.,
 0.015 lb/mmBtu, by the date specified in Paragraph 66, i.e., no later than December 31, 2012. Emission testing conducted to determine compliance with this limit shall use methods and procedures as specified in Paragraph 90 of the Decree.
- 1.5 Compliance Assurance Monitoring (CAM)

As provided by 40 CFR 64.5(a)(2), if the Permittee applies for a significant modification of the CAAPP Permit for the source to include the new control system(s) for the affected boiler, the Permittee shall submit a compliance assurance monitoring (CAM) plan in accordance with 40 CFR Part 64, Compliance Assurance Monitoring for the boiler, to the extent that it would be a pollutant-specific emissions unit for which the proposed permit revision is applicable.

- 1.6 Work Practices and Operational Requirements for PM and SO₂ Control Devices
 - a. i. The Permittee shall operate and maintain each PM control device on the affected boiler in accordance with Paragraphs 83 and 87 of the Decree:

Note: Paragraphs 83 and 87 of the Decree generally require that PM control devices be operated to maximize PM emission reductions at all times when Unit is in operation to the extent reasonably practicable and specify certain minimum operating and maintenance practices that the Permittee must implement for this purpose.

ii. The Permittee shall operate and maintain the ESP on each affected boiler in accordance with Paragraph 84 of the Decree.

Note: Paragraph 84 of the Decree requires that the Permittee implement the practices recommended by the PM Emission Control Optimization Studies performed in accordance with Paragraph 84 of the Decree or other alternative actions approved by USEPA in accordance with Paragraph 84 of the Decree, unless the criterion in Paragraph 87 of the Decree that lift this requirement have been satisfied.

- iii. The Permittee shall operate and maintain the affected boiler and Unit 6, and associated PM control equipment in accordance with the PM control plan maintained by the Permittee pursuant to Condition 1.9-2(b)(i)(A).
- b. i. Effective no later than December 31, 2012, the Permittee shall not operate the affected boiler and Unit 6 unless the requirements of Paragraph 66 of the Decree with respect to addition of a flue gas desulfurization system or an equivalent SO₂ control technology to the affected boiler have been fulfilled.
 - ii. The Permittee shall operate and maintain the additional SO_2 control system on the affected boiler, as addressed above, in accordance with Paragraph 69 of the Decree.

Note: Paragraph 69 of the Decree generally requires that SO_2 control system be operated to maximize SO_2 emission reductions at all times when Unit is in operation to the extent reasonably practicable and specify certain minimum operating and maintenance practices that the Permittee must implement for this purpose.

- iii. The Permittee shall operate and maintain the additional SO_2 control system on the affected boiler in accordance with the SO_2 control plan maintained by the Permittee pursuant to Condition 1.9-2(b)(iii)(A).
- c. The ductwork for the affected boiler shall not include a "bypass duct" that would enable the flue gas from the affected boiler to bypass the baghouse system.

1.7 Testing Requirements

- a. i. The Permittee shall have testing conducted to measure the PM emissions from the affected boiler on a periodic basis consistent with the requirements of Paragraphs 89 and 119 of the Decree with respect to the timing of PM emission tests.
 - ii. The Permittee shall also have testing conducted to measure the PM emissions from the affected boiler within 90 days (or such later date set by the Illinois EPA) following a request by the Illinois EPA for such measurements.

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- b. i. These measurements shall be performed in the maximum operating range of the affected boiler and otherwise under representative operating conditions.
 - ii. A. The methods and procedures used for measurements to determine compliance with the applicable PM emission standards and limitations shall be in accordance with Paragraph 90 of the Decree.
 - B. In conjunction with such measurements, measurements of condensable PM shall also be conducted by USEPA Method 202 (40 CFR Part 51, Appendix M) or other established test method approved by the Illinois EPA.
- c. Except for minor deviations in test methods, as defined by 35 IAC 283.130, PM emission testing shall be conducted in accordance with a test plan prepared by the testing service or the Permittee and submitted to the Illinois EPA for review prior to testing, and the conditions, if any, imposed by the Illinois EPA as part of its review and approval of the test plan, pursuant to 35 IAC 283.220 and 283.230. The Permittee shall submit this test plan at least 60 days prior to the actual date of testing.
- d. The Permittee shall notify the Illinois EPA prior to conducting PM emission testing to enable the Illinois EPA to observe testing. Notification for the expected test date shall be submitted a minimum of 30 days prior to the expected date of testing. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual test date. The Illinois EPA may on a case-by case basis accept shorter advance notice if it would not interfere with the Illinois EPA's ability to observe testing.
- e. The Permittee shall submit the Final Report(s) for this PM emission testing to the Illinois EPA within 45 days of completion of testing, which report(s) shall include the following information:
 - i. The name and identification of the affected unit(s) and the results of the tests.
 - ii. The name of the company that performed the tests.
 - iii. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the Permittee.
 - iv. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test Decree, including a description of any minor deviations from the test plan, as provided by 35 IAC 283.230(a).
 - v. Detailed description of operating conditions during testing, including:

- A. Operating information for the affected boiler, i.e., firing rate of each boiler (million Btu/hr) and composition of fuel as burned (ash, sulfur and heat content).
- B. Combustion system information, i.e., settings for distribution of primary and secondary combustion air, settings for O_2 concentration in the boiler, and levels of CO in the flue gas, if determined by any diagnostic measurements.
- C. Control equipment information, i.e., equipment condition and operating parameters during testing, including any use of the flue gas conditioning system.
- D. Load during testing (megawatt output).
- vii. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
- viii. The SO_2 , NO_x , O_2 or CO_2 , (hourly averages) and opacity data (6-minute averages) measured during testing.

Note: This permit does not affect the requirements for emission testing contained in the existing permits for the source.

- 1.8 Monitoring Requirements
 - a. The Permittee shall install, operate, and maintain continuous monitoring equipment for operation of the sorbent injection system, i.e., rate of injection of sorbent.
 - b. The Permittee shall install, operate and maintain continuous monitoring equipment to measure the following operating parameters of the baghouse system:
 - The temperature of the flue gas at the inlet of the system (hourly average).
 - ii. The pressure drop across the system (hourly average).
 - c. The Permittee shall comply with all applicable requirements of 35 IAC Part 225 related to monitoring of mercury emissions from the affected boiler.

Note: This permit does not affect the requirements for monitoring contained in the existing permits for the source.

- 1.9-1 Recordkeeping Requirements for the Coal Supply for the Affected Boiler
 - a. The Permittee shall comply with all applicable requirements of 35 IAC Part 225 related to sampling and analysis of the coal supply to the affected boiler for its mercury content.

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b. The Permittee shall keep records of the mercury and heat content of the coal supply to the affected boiler, with supporting data for the associated sampling and analysis methodology, so as to have representative data for the mercury content of the coal supply to the boiler to accompany mercury emission data collected for the boiler. The analysis of the coal for mercury content shall be conducted using appropriate ASTM Methods as specified in 35 IAC Part 225.

Note: This permit does not affect the recordkeeping requirements contained in the existing permits for the source.

1.9-2 Records for Control Devices and Control Equipment

The Permittee shall maintain the following records for the new baghouse, scrubber, and sorbent injection systems on the affected boilers:

- a. i. Logs for the Baghouse System
 - A. An operating log or other records for the baghouse system that, at a minimum: (1) Identifies the trigger for bag cleaning, e.g., manual, timer, or pressure drop; (2) Identifies each period when a Unit was in operation and the baghouse was not being operated or was not operating effectively; (3) Identifies each period when any baghouse module(s) have been taken out of regular service, with identification of the module(s) and explanation; and (4) Specifically documents the implementation of the operating procedures related to the baghouse that are required to be or are otherwise implemented pursuant to Condition 1.6(a).
 - B. Maintenance and repair log or other records for the baghouse system that, at a minimum: (1) List the activities performed, with date and description, and (2) Specifically document the maintenance and repair activities related to the baghouse that are required to be or are otherwise performed pursuant to Condition 1.6(a).
 - ii. Logs for the Scrubber System
 - A. An operating log or other records for the scrubber system that, at a minimum (1) identify each period of time when the affected Unit was in operation and associated scrubber was not being operated or was not operating effectively, and (2) specifically document the implementation of the operating procedures related to the scrubber that are required to be or are otherwise implemented pursuant to Condition 1.6(b).
 - B. Maintenance and repair log or other records for the system that, at a minimum: (1) list the activities performed, with date and description, and (2) specifically document the maintenance and repair

activities related to scrubber that are required to be or are otherwise performed pursuant to Condition 1.6(b).

- iii. Logs for the Sorbent Injection System
 - A. An operating log or other records for the system that, at a minimum: (1) identify the sorbent that is being used, the setting(s) for sorbent injection rate and each period of time when an affected boiler was in operation and the system was also being operated, and (2) specifically documents the implementation of the operating procedures related to the sorbent injection that are required to be or are otherwise implemented pursuant to Condition 1.6(c)..
 - B. Maintenance and repair log or other records for the system that, at a minimum, list the activities performed, with date and description.
- b. PM Emission Control Planning
 - i. The following records related to the procedures and practices for control of PM emissions from the affected boilers:
 - A. A record, which shall be kept up to date, identifying the specific operating procedures and maintenance practices (including procedures and practices specifically related to startups and malfunction/breakdown incidents) currently being implemented by the Permittee for the affected boiler and Unit and associated PM control equipment to satisfy Conditions 1.6(a). These procedures and practices are referred to as the "PM Control Plan" in this permit.
 - B. Accompanying this record, the Permittee shall maintain a demonstration showing that the above PM Control Plan fulfills the requirements of Conditions 1.6(a).
 - ii. Copies of the records required by Conditions 1.9-2(b)(i) shall be submitted to the Illinois EPA upon request.
 - iii. Accompanying the records required by Conditions 1.9-2(b)(i), a file containing a copy of all correspondence and other written material exchanged with USEPA that addresses the procedures and practices that must be implemented pursuant to Paragraphs 83, 84 and 87 of the Decree. This file shall be retained for at least three years after the permanent shutdown of the affected Unit.
- c. Specific Records for the Sorbent Injection System

During the period before recordkeeping is required for usage of sorbent pursuant to 35 IAC Part 225, the usage of sorbent (lbs)

and average sorbent injection rate (lbs/operating hour), on a monthly basis.

Note: This permit does not affect the recordkeeping requirements for the existing control system(s) that are contained in the existing permits for the source.

- 1.9-3 Other Recordkeeping Requirements
 - a. Summary Records Related to the PM Control Plan

The Permittee shall maintain the following records for each incident when applicable action(s) required pursuant to the PM Control Plan were not taken for affected boiler or Unit:

- i. The date of the incident.
- ii. A description of the incident, including the required action(s) that were not taken; other actions or mitigation measures that were taken, if any; and the likely consequences of the incidents as related to emissions.
- iii. The time at and means by which the incident was identified.
- iv. The length of time after the incident was identified before required action(s) were taken or were no longer required and an explanation why this time was not shorter, including a discussion of the timing of any mitigation measures that were taken for the incident.
- v. The estimated total duration of the incident, i.e., the total length of time that the affected boiler ran without the required action(s) being taken.
- vi. A discussion of the probable cause of the incident and any preventative measures taken.
- vii. A discussion whether any applicable PM emission standards or limits, as addressed by Condition 1.3, 1.4 or 1.6, may have been violated, either during or as a result of the incident, with supporting explanation.
- b. Records Related to Mercury Emissions
 - i. The Permittee shall comply with all applicable recordkeeping requirements of 35 IAC Part 225 related to control of mercury emissions from the affected boiler.
 - ii. During the period before the Permittee is required to conduct monitoring for the mercury emissions of the affected boiler pursuant to 35 IAC Part 225, the Permittee shall maintain records of emission data for mercury collected for the affected boiler by the Permittee, including emissions (micrograms per cubic meter, pounds per hour, or pounds per million Btu) and control efficiency for different modes of operation of the boiler and sorbent

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injection system, with identification and description of the mode of operations.

- 1.10-1 Reporting Requirements Reporting of Deviations
 - a. Prompt Reporting of Deviations

For the affected boiler, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as follows. At a minimum, these notifications shall include a description of such deviations, including whether they occurred during startup or malfunction/breakdown, and a discussion of the possible cause of such deviations, any corrective actions and any preventative measures taken.

- Immediate notification for a deviation from requirements related to PM emissions if the deviation is accompanied by the failure of three or more compartments in the baghouse system.
- ii. Notification with the quarterly reports required by Condition 1.10-2(a) for deviations not addressed above, including deviations from other applicable requirements, e.g., work practice requirements, required operating procedures, required maintenance practices, and recordkeeping requirements.
- b. Periodic Reporting of Deviations

The quarterly reports required by Condition 1.10-2(a) shall include the following information for the affected boiler related to deviations from permit requirements during the quarter.

- i. A listing of all instances of deviations that have been reported in writing to the Illinois EPA as provided by Condition 1.10-1(a)(i), including identification of each such written notification or report. For this purpose, the Permittee need not resubmit copies of these previous notifications or reports but may elect to supplement such material.
- ii. Detailed information, as required by Condition 1.10-1(a)(ii), for all other deviations.

Note: This permit does not affect the requirements for reporting of deviations contained in the existing permits for the source.

- 1.10-2 Reporting Requirements Periodic Reporting
 - a. The Permittee shall submit quarterly reports to the Illinois EPA.
 - These reports shall include a summary of information recorded during the quarter pursuant to Conditions 1.9-3(a) and (b).

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- ii. These reports shall include the information for the affected boiler related to deviations during the quarter specified by Condition 1.10-1(b).
- iii. These reports shall be submitted within 45 days after the end of each calendar quarter. For example, the quarterly report for the first quarter, i.e., January, February and March, shall be submitted by May 15.
- b. The Permittee shall comply with all applicable reporting requirements of 35 IAC Part 225 related to control of mercury emissions from the affected boiler.

Note: This permit does not affect the requirements for quarterly reporting contained in the existing permits for the source.

1.11 Authorization for Operation

The Permittee may operate the affected boiler with the new baghouse, scrubber, and sorbent injection systems under this construction permit until such time as final action is taken to address these systems in the CAAPP permit for the source provided that the Permittee submits an appropriate application for CAAPP permit, which incorporates new requirements established by this permit within one year (365 days) of beginning operations of the affected boiler with these systems.

Please note that this permit does not address requirements of the Consent Decree for emissions of nitrogen oxides (NO_x). This is because this permit does not address any changes to control equipment for NO_x emissions.

If you have any questions concerning this permit, please contact Kunj Patel or Christopher Romaine at 217/782-2113.

Edwin C. Balunha

Edwin C. Bakowski, P.E. Acting Manager, Permit Section Division of Air Pollution Control

ECB:CPR:KMP:

cc: Region 2



STATE OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL P. O. BOX 19506 SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

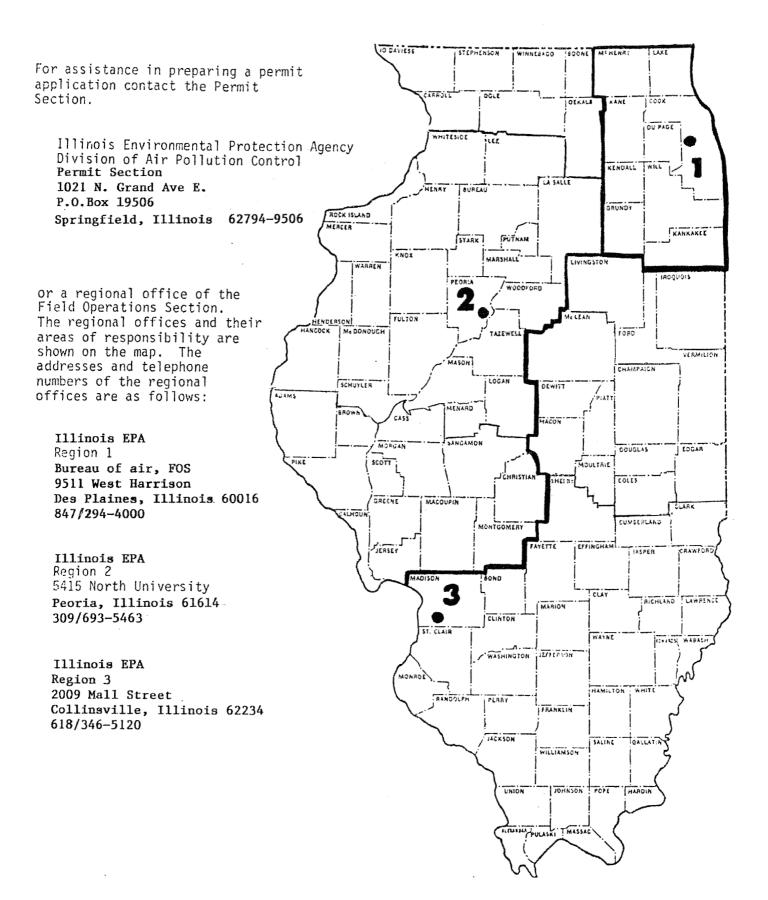
The following conditions are applicable unless susperseded by special condition(s).

- 1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.
- 2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act and Regulations adopted by the Illinois Pollution Control Board.
- 3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.
- 4. The permittee shall allow any duly authorized agent of the Agency upon the presentation of credentials, at reasonable times:
 - a. to enter the permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,
 - b. to have access to and to copy any records required to be kept under the terms and conditions of this permit,
 - c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit.
 - d. to obtain and remove samples of any discharge or emissions of pollutants, and
 - e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.
- 5. The issuance of this permit:
 - a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,
 - b. does not release the permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities,
 - c. does not release the permittee from compliance with other applicable statutes and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations,

ć	l.	does	not	: take	into	consideration	or	attest	: to	the	e struct	ural	stability	r of	any	units o	r part	s of	the	project.	, and
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- e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.
- 6. a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Agency before the equipment covered by this permit is placed into operation.
 - b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.
- 7. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:
 - a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed, or
 - b. upon finding that any standard or special conditions have been violated, or
 - c. upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.

DIRECTORY ENVIRONMENTAL PROTECTION AGENCY BUREAU OF AIR





ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. Box 19506, SPRINGFIELD, ILLINOIS 62794-9506 -(217) 782-2113 ROD R. BLAGOJEVICH, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Dynegy Midwest Generation, Inc. Attn: Rick Diericx 2828 North Monroe Street Decatur, Illinois 62526

Application No.: 07010031 I.D. No.: 125804AAB Applicant's Designation: Date Received: January 17, 2007 Subject: Baghouse, Scrubber and Sorbent Injection Systems for Unit 6 Date Issued: April 16, 2007 Location: Havana Power Plant, 15260 N. State Route 78, Havana, Mason County

Permit is hereby granted to the above-designated Permittee to CONSTRUCT equipment consisting of a baghouse, scrubber, and sorbent injection system for the Unit 6 Boiler and associated installation of booster fans, as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1.1 Introduction

- а. This Permit authorizes construction of a baghouse system (Baghouses A and B), scrubber system (Scrubbers A and B), and sorbent injection system to supplement the existing emission control systems on the existing Unit 6 boiler (also known as Boiler 9). The new baghouse system, scrubber system, and sorbent injection system would further process the flue gas from this existing coal-fired boiler, which is equipped with a particulate agglomerator, electrostatic precipitator (ESP), and selective catalytic reduction (SCR) system. This permit also authorizes installation of booster fans on the boiler to compensate for the additional pressure drop from these new control systems.
- b. i. This permit is issued based on this project being an emissions control project, whose purpose and effect will be to reduce emissions of sulfur dioxide (SO_2) , particulate matter (PM), and mercury from the existing boiler and which will not increase emissions of other PSD pollutants. As such, the terms and conditions of the existing permits will continue to govern emissions and operation of the boiler except as specifically indicated.
 - This permit is issued based on the receiving, storage and ii. handling of limestone and halogenated activated carbon for the new control systems qualifying as insignificant

activities, with annual emissions of PM in the absence of control equipment that would be no more than 0.44 tons, so that this activity need not be addressed by this permit. This does affect the Permittee's obligation to comply with all applicable requirements that apply to the receiving, storage and handling of these materials.

- c. This permit does not authorize any modifications to the existing boiler or generating unit, which would increase their capacity or potential emissions.
- d. This permit does not affect requirements for the affected boiler established by the Consent Decree in United States of America and the State of Illinois, American Bottom Conservancy, Health and Environmental Justice-St. Louis, Inc., Illinois Stewardship Alliance, and Prairie Rivers Network, v. Illinois Power Company and Dynegy Midwest Generation Inc., Civil Action No. 99-833-M,7R, U.S. District Court, Southern District of Illinois (Decree), certain provisions of which are referenced by this permit. In addition, as the provisions of the Decree are referenced in certain conditions of this permit, in the event of inconsistency between a permit condition and the provision of the Decree or if a provision of the Decree is revised, the actual provision of the Decree shall govern.
- 1.2 Applicability Provisions
 - a. The "affected boiler" for the purpose of these unit-specific conditions is the existing Unit 6 boiler after the initial startup of the new emissions control systems, as described in Condition 1.1.
 - b. For purposes of certain conditions related to the Decree, the affected boiler is also part of a "Unit" as defined by Paragraph 50 of the Decree, which defines a "Unit" to mean collectively, the boiler that produce steam for the steam turbine (i.e., the affected boiler), the coal pulverizer, stationary equipment that feeds coal to the boiler, the steam turbine, the generator, the equipment necessary to operate the generator, steam turbine and boiler, and all ancillary equipment, including pollution control equipment.
- 1.3 Applicable Emission Standards for the Affected Boiler
 - a. i. The affected boiler shall comply with applicable emission standards under the federal New Source Performance Standards (NSPS) for Fossil Fuel Fired Steam Generators, 40 CFR 60 Subpart D, as addressed in existing permits for the affected boiler.
 - ii. The affected boiler shall comply with applicable emission standards and requirements related to mercury emission pursuant to 35 IAC Part 225, by the applicable dates specified by theses rules.

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- b. The affected boiler shall comply with applicable emission standards under Title 35, Subtitle B, Chapter I, Subchapter c of the Illinois Administrative Code, as addressed in existing permits for the affected boiler.
- c. The PM emission rate of the affected boiler shall not be greater than the limit specified in Paragraph 86 of the Decree, i.e., 0.030 lb/mmBtu. Emission testing conducted to determine compliance with this limit shall use methods and procedures as specified in Paragraph 90 of the Decree

Note: The PM emission rate for the affected boiler pursuant to the Decree is more stringent than the applicable NSPS and state standards for PM.

- 1.4 Future Applicable Emission Rate under the Consent Decree
 - a. The SO₂ emission rate of affected boiler shall be no greater than the limit specified in Paragraph 66 of the Decree, i.e., 0.100 lb/mmBtu, by the date specified in Paragraph 66, i.e., no later than December 31, 2012. Emission testing conducted to determine compliance with this limit shall use methods and procedures as specified in Paragraph 82 of the Decree.

Note: The SO_2 emission rate for the affected bailer pursuant to the Decree, when it takes effect, will be more stringent than the current applicable federal NSPS standards of 1.2 lb/mmBtu.

- b. The PM emission rate of the affected boiler shall be no greater than the limit specified in Paragraph 85 of the Decree, i.e., 0.015 lb/mmBtu, by the date specified in Paragraph 66, i.e., no later than December 31, 2012. Emission testing conducted to determine compliance with this limit shall use methods and procedures as specified in Paragraph 90 of the Decree.
- 1.5 Compliance Assurance Monitoring (CAM)

As provided by 40 CFR 64.5(a)(2), if the Permittee applies for a significant modification of the CAAPP Permit for the source to include the new control system(s) for the affected boiler, the Permittee shall submit a compliance assurance monitoring (CAM) plan in accordance with 40 CFR Part 64, Compliance Assurance Monitoring for the boiler, to the extent that it would be a pollutant-specific emissions unit for which the proposed permit revision is applicable.

1.6 Work Practices and Operational Requirements for PM and \mbox{SO}_2 Control Devices

a. i. The Permittee shall operate and maintain each PM control device on the affected boiler in accordance with Paragraphs 83 and 87 of the Decree:

> Note: Paragraphs 83 and 87 of the Decree generally require that PM control devices be operated to maximize PM emission reductions at all times when Unit is in operation to the extent reasonably practicable and specify certain minimum

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operating and maintenance practices that the Permittee must implement for this purpose.

ii. The Permittee shall operate and maintain the ESP on each affected boiler in accordance with Paragraph 84 of the Decree.

Note: Paragraph 84 of the Decree requires that the Permittee implement the practices recommended by the PM Emission Control Optimization Studies performed in accordance with Paragraph 84 of the Decree or other alternative actions approved by USEPA in accordance with Paragraph 84 of the Decree, unless the criterion in Paragraph 87 of the Decree that lift this requirement have been satisfied.

- iii. The Permittee shall operate and maintain the affected boiler and Unit 6, and associated PM control equipment in accordance with the PM control plan maintained by the Permittee pursuant to Condition 1.9-2(b)(i)(A).
- b. i. Effective no later than December 31, 2012, the Permittee shall not operate the affected boiler and Unit 6 unless the requirements of Paragraph 66 of the Decree with respect to addition of a flue gas desulfurization system or an equivalent SO₂ control technology to the affected boiler have been fulfilled.
 - ii. The Permittee shall operate and maintain the additional SO₂ control system on the affected boiler, as addressed above, in accordance with Paragraph 69 of the Decree.

Note: Paragraph 69 of the Decree generally requires that SO_2 -control system be operated to maximize SO_2 -emission reductions at all times when Unit is in operation to the extent reasonably practicable and specify certain minimum operating and maintenance practices that the Permittee must implement for this purpose.

- iii. The Permittee shall operate and maintain the additional SO_2 control system on the affected boiler in accordance with the SO_2 control plan maintained by the Permittee pursuant to Condition 1.9-2(b)(iii)(A).
- c. The ductwork for the affected boiler shall not include a "bypass duct" that would enable the flue gas from the affected boiler to bypass the baghouse system.

1.7 Testing Requirements

a. i. The Permittee shall have testing conducted to measure the PM emissions from the affected boiler on a periodic basis consistent with the requirements of Paragraphs 89 and 119 of the Decree with respect to the timing of PM emission tests.

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- ii. The Permittee shall also have testing conducted to measure the PM emissions from the affected boiler within 90 days (or such later date set by the Illinois EPA) following a request by the Illinois EPA for such measurements.
- b. i. These measurements shall be performed in the maximum operating range of the affected boiler and otherwise under representative operating conditions.
 - ii. A. The methods and procedures used for measurements to determine compliance with the applicable PM emission standards and limitations shall be in accordance with Paragraph 90 of the Decree.
 - B. In conjunction with such measurements, measurements of condensable PM shall also be conducted by USEPA Method 202 (40 CFR Part 51, Appendix M) or other established test method approved by the Illinois EPA.
- c. Except for minor deviations in test methods, as defined by 35 IAC 283.130, PM emission testing shall be conducted in accordance with a test plan prepared by the testing service or the Permittee and submitted to the Illinois EPA for review prior to testing, and the conditions, if any, imposed by the Illinois EPA as part of its review and approval of the test plan, pursuant to 35 IAC 283.220 and 283.230. The Permittee shall submit this test plan at least 60 days prior to the actual date of testing.
- d. The Permittee shall notify the Illinois EPA prior to conducting PM emission testing to enable the Illinois EPA to observe testing. Notification for the expected test date shall be submitted a minimum of 30 days prior to the expected date of testing. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual test date. The Illinois EPA may on a case-by case basis accept shorter advance notice if it would not interfere with the Illinois EPA's ability to observe testing.
- e. The Permittee shall submit the Final Report(s) for this PM emission testing to the Illinois EPA within 45 days of completion of testing, which report(s) shall include the following information:
 - i. The name and identification of the affected unit(s) and the results of the tests.
 - ii. The name of the company that performed the tests.
 - iii. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the Permittee.
 - iv. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test Decree, including a description of any minor

deviations from the test plan, as provided by 35 IAC 283.230(a).

- v. Detailed description of operating conditions during testing, including:
 - A. Operating information for the affected boiler, i.e., firing rate of each boiler (million Btu/hr) and composition of fuel as burned (ash, sulfur and heat content).
 - B. Combustion system information, i.e., settings for distribution of primary and secondary combustion air, settings for O_z concentration in the boiler, and levels of CO in the flue gas, if determined by any diagnostic measurements.
 - C. Control equipment information, i.e., equipment condition and operating parameters during testing, including any use of the flue gas conditioning system.
 - D. Load during testing (megawatt output).
- vii. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
- viii. The SO_{27} NO_{*7}- O_2 or CO_{27} (hourly averages) and opacity data (6-minute averages) measured during testing.

Note: This permit does not affect the requirements for emission testing contained in the existing permits for the source.

1.8 Monitoring Requirements

- a. The Permittee shall install, operate, and maintain continuous monitoring equipment for operation of the sorbent injection system, i.e., rate of injection of sorbent.
- b. The Permittee shall install, operate and maintain continuous monitoring equipment to measure the following operating parameters of the baghouse system:
 - i. The temperature of the flue gas at the inlet of the system (hourly average).
 - ii. The pressure drop across the system (hourly average).
- c. The Permittee shall comply with all applicable requirements of 35 IAC Part 225 related to monitoring of mercury emissions from the affected-boiler.

Note: This permit does not affect the requirements for monitoring contained in the existing permits far the source.

- 1.9-1 Recordkeeping Requirements for the Coal Supply for the Affected Boiler
 - a. The Permittee shall comply with all applicable requirements of 35 IAC Part 225 related to sampling and analysis of the coal supply to the affected boiler for its mercury content.
 - b. The Permittee shall keep records of the mercury and heat content of the coal supply to the affected boiler, with supporting data for the associated sampling and analysis methodology, so as to have representative data for the mercury content of the coal supply to the boiler to accompany mercury emission data collected for the boiler. The analysis of the coal for mercury content shall be conducted using appropriate ASTM Methods as specified in 35 IAC Part 225.

Note: This permit does not affect the recordkeeping requirements contained in the existing permits for the source.

1.9-2 Records for Control Devices and Control Equipment

The Permittee shall maintain the following records for the new baghouse, scrubber, and sorbent injection systems on the affected boilers:

- a. i. Logs for the Baghouse System
 - A. An operating log or other records for the baghouse system that, at a minimum: (1) Identifies the trigger for bag cleaning, e.g., manual, timer, or pressure drop; (2) Identifies each period when a Unit was in operation and the baghouse was not being operated or was not operating effectively; (3) Identifies each period when any baghouse module(s) have been taken out of regular service, with identification of the module(s) and explanation; and (4) Specifically documents the implementation of the operating procedures related to the baghouse that are required to be or are otherwise implemented pursuant to Condition 1.6(a).
 - B. Maintenance and repair log or other records for the baghouse system that, at a minimum: (1) List the activities performed, with date and description, and (2) Specifically document the maintenance and repair activities related to the baghouse-that are required to be or are otherwise performed pursuant to Condition 1.6(a).

ii. Logs for the Scrubber System

A. An operating log or other records for the scrubber system that, at a minimum (1) identify each period of time when the affected Unit was in operation and associated scrubber was not being operated or was not operating effectively, and (2) specifically document the implementation of the operating procedures

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related to the scrubber that are required to be or are otherwise implemented pursuant to Condition 1.6(b).

B. Maintenance and repair log or other records for the system that, at a minimum: (1) list the activities performed, with date and description, and (2) specifically document the maintenance and repair activities related to scrubber that are required to be or are otherwise performed pursuant to Condition 1.6(b).

iii. Logs for the Sorbent Injection System

- A. An operating log or other records for the system that, at a minimum: (1) identify the sorbent that is being used, the setting(s) for sorbent injection rate and each period of time when an affected boiler was in operation and the system was also being operated, and (2) specifically documents the implementation of the operating procedures related to the sorbent injection that are required to be or are otherwise implemented pursuant to Condition 1.6(c)..
- B. Maintenance and repair log or other records for the system that, at a minimum, list the activities performed, with date and description.
- b. <u>PM Emission Control Planning</u>
 - i. The following records related to the procedures and practices for control of PM emissions from the affected boilers:
 - A. A record, which shall be kept up to date, identifying the specific operating procedures and maintenance practices (including procedures and practices specifically related to startups and malfunction/breakdown incidents) currently being implemented by the Permittee for the affected boiler and Unit and associated PM control equipment to satisfy Conditions 1.6(a). These procedures and practices are referred to as the "PM Control Plan" in this permit.
 - B. Accompanying this record, the Permittee shall maintain a demonstration showing that the above PM Control Plan fulfills the requirements of Conditions 1.6(a).
 - ii. Copies of the records required by Conditions 1.9-2(b)(i) shall be submitted to the Illinois EPA upon request.
 - iii. Accompanying the records required by Conditions 1.92(b)(i), a file containing a copy of all correspondence and other written material exchanged with USEPA that addresses the

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procedures and practices that must be implemented pursuant to Paragraphs 83, 84 and 87 of the Decree. This file shall be retained for at least three years after the permanent shutdown of the affected Unit.

c. Specific Records for the Sorbent Injection System

During the period before recordkeeping is required for usage of sorbent pursuant to 35 IAC Part 225, the usage of sorbent (lbs) and average sorbent injection rate (lbs/operating hour), on a monthly basis.

Note: This permit does not affect the recordkeeping requirements for the existing control system(s) that are contained in the existing permits for the source.

- 1.9-3 Other Recordkeeping Requirements
 - a. Summary Records Related to the PM Control Plan

The Permittee shall maintain the following records for each incident when applicable action(s) required pursuant to the PM Control Plan were not taken for affected boiler or Unit:

- i. The date of the incident.
- ii. A description of the incident, including the required action(s) that were not taken; other actions or mitigation measures that were taken, if any; and the likely consequences of the incidents as related to emissions.
- iii. The time at and means by which the incident was identified.
- iv. The length of time after the incident was identified before required action(s) were taken or were no longer required and an explanation why this time was not shorter, including a discussion of the timing of any mitigation measures that were taken for the incident.
- v. The estimated total duration of the incident, i.e., the total length of time that the affected boiler ran without the required action(s) being taken.
- vi. A discussion of the probable cause of the incident and any preventative measures taken.
- vii. A discussion whether any applicable PM emission standards or limits, as addressed by Condition 1.3, 1.4 or 1.6, may have been violated, either during or as a result of the incident, with supporting explanation.
- b. Records Related to Mercury Emissions
 - i. The Permittee shall comply with all applicable record keeping requirements of 35 IAC Part 225 related to control of mercury emissions from the affected boiler.

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- ii. During the period before the Permittee is required to conduct monitoring for the mercury emissions of the affected boiler pursuant to 35 IAC Part 225, the Permittee shall maintain records of emission data for mercury collected for the affected boiler by the Permittee, including emissions (micrograms per cubic meter, pounds per hour, or pounds per million Btu) and control efficiency for different modes of operation of the boiler and sorbent injection system, with identification and description of the mode of operations.
- 1.10-1 Reporting Requirements Reporting of Deviations
 - a. Prompt Reporting of Deviations

For the affected boiler, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as follows. At a minimum, these notifications shall include a description of such deviations, including whether they occurred during startup or malfunction/breakdown, and a discussion of the possible cause of such deviations, any corrective actions and any preventative measures taken.

- i. Immediate notification for a deviation from requirements related to PM emissions if the deviation is accompanied by the failure of three or more compartments in the baghouse system.
- ii. Notification with the quarterly reports required by Condition 1.10-2(a) for deviations not addressed above, including deviations from other applicable requirements, e.g., work practice requirements, required operating procedures, required maintenance practices, and recordkeeping requirements.

b. Periodic Reporting of Deviations

The quarterly reports required by Condition 1.10-2(a) shall include the following information for the affected boiler related to deviations from permit requirements during the quarter.

- i. A listing of all instances of deviations that have been reported in writing to the Illinois EPA as provided by Condition 1.10-1(a)(i), including identification of each such written notification or report. For this purpose, the Permittee need not resubmit copies of these previous notifications or reports but may elect to supplement such material.
- ii. Detailed information, as required by Condition 1.10-1(a)(ii), for all other deviations.

Note: This permit does not affect the requirements for reporting of deviations contained in the existing permits for the source.

1.10-2 Reporting Requirements - Periodic Reporting

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 - a. The Permittee shall submit-quarterly reports to the Illinois EPA.
 - i. These reports shall include a summary of information recorded during the quarter pursuant to Conditions 1.9-3(a) and (b).
 - ii. These reports shall include the information for the affected boiler related to deviations during the quarter specified by Condition 1.10-1(b).
 - iii. These reports shall be submitted within 45 days after the end of each calendar quarter. For example, the quarterly report for the first quarter, i.e., January, February and March, shall be submitted by May 15.
 - b. The Permittee shall comply with all applicable reporting requirements of 35 IAC Part 225 related to control of mercury emissions from the affected boiler.

Note: This permit does not affect the requirements for quarterly reporting contained in the existing permits for the source.

1.11 Authorization for Operation

The Permittee may operate the affected boiler with the new baghouse, scrubber, and sorbent injection systems under this construction permit until such time as final action is taken to address these systems in the CAAPP permit for the source provided that the Permittee submits an appropriate application for CAAPP permit, which incorporates new requirements established by this permit within one year (365 days) of beginning operations of the affected boiler with these systems.

Please note that this permit does not address requirements of the Consent Decree for emissions of nitrogen oxides (NO_{*}). This is because this permit does not address any changes to control equipment for NO_{*7} emissions.

If you have any questions concerning this permit, please contact Kunj Patel or Christopher Romaine at 217/782-2113.

Edwin C. Bakowski, P.E. Acting Manager, Permit Section Division of Air Pollution Control

ECB:CPR:KMP:

cc: Region 2

STATE OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL P. 0. BOX 19506 SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless susperseded by special condition(s).

- 1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.
- 2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act and Regulations adopted by the Illinois Pollution Control Board.
- 3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.
- 4. The permittee shall allow any duly authorized agent of the Agency upon the presentation of credentials, at reasonable times:
 - a. to enter the permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,
 - b. to have access to and to copy any records required to be kept under the terms and conditions of this permit,
 - c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,
 - d. to obtain and remove samples of any discharge or emissions of pollutants, and
 - e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.

5. The issuance of this permit:

- a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,
- b. does not release the permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities,
- c. does not release the permittee from compliance with other applicable statutes and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations,
- d. does not take into consideration or attest to the structural stability of any units or parts of the project, and
- e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.
- 6. a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Agency before the equipment covered by this permit is placed into operation.
 - b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.
- 7. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:
 - a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed, or
 - b. upon finding that any standard or special conditions have been violated, or
 - c. upon any violations of the Environmental Protection Actor any regulation effective thereunder as a result of the construction or development authorized by this permit.

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