



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live.*

---

*Mitchell E. Daniels, Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
(800) 451-6027  
[www.IN.gov/idem](http://www.IN.gov/idem)

TO: Interested Parties / Applicant

DATE: May 1, 2006

RE: Hoosier Energy / 153-19646-00005

FROM: Nisha Sizemore  
Chief, Permits Branch  
Office of Air Quality

### **Notice of Decision: Approval - Effective Immediately**

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures  
FNPER.dot 03/23/06



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## **TITLE IV (ACID RAIN) PERMIT RENEWAL OFFICE OF AIR QUALITY**

**Hoosier Energy Rural Electric Cooperative (REC), Inc.  
Merom Generating Station  
5500 West Old 54, Sullivan, Indiana 47882**

**ORIS: 6213**

The owners and operators (hereinafter collectively known as the Permittee) of the above source are issued this permit under the provisions of 326 Indiana Administrative Code (IAC) 21 with conditions listed on the attached pages.

Operation Permit No.: AR 153-19646-00005	
Issued by: N. Sizemore for Paul Dubenetzky Assistant Commissioner Office of Air Quality	Issuance Date: May 1, 2006  Expiration Date: May 1, 2011

## Title IV Operating Conditions

### Title IV Source Description:

- (a) One (1) pulverized coal-fired, dry bottom wall-fired boiler, identified as Unit 1SG1 (Unit 1 in the Title V operating permit), constructed in 1976, rated at 5,088 million Btu per hour (MMBtu/hr) energy input, used to generate up to 490 megawatts (gross) of electricity. Unit 1SG1 uses No. 2 fuel oil for start ups and flame stabilization. Unit 1SG1 cannot operate at load solely using No. 2 fuel oil. Unit 1SG1 utilizes the following control equipment: Electrostatic Precipitator (ESP), Flue Gas Desulfurization (FGD) Wet Nonregenerative Scrubber System (identified as CE1B), and Selective Catalytic Reduction (SCR). Controlled emissions from Unit 1SG1 are exhausted to the atmosphere through a 19-foot diameter flue liner (Stack SV1) which is housed in a 700-foot shell that is shared by both Units 1SG1 and 2SG1. Opacity is measured with a continuous opacity monitor (COM). Sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) emissions are measured with a continuous emission monitor system (CEMS).
- (b) One (1) pulverized coal-fired, dry bottom wall-fired boiler, identified as Unit 2SG1 (Unit 2 in the Title V operating permit), constructed in 1976, rated at 5,088 MMBtu/hr energy input, used to generate up to 490 megawatts (gross) of electricity. Unit 2SG1 uses No. 2 fuel oil for start ups and flame stabilization. Unit 2SG1 can not operate at load solely using No. 2 fuel oil. Unit 2SG1 utilizes the following control equipment: Electrostatic Precipitator (ESP), Flue Gas Desulfurization (FGD) Wet Nonregenerative Scrubber System (identified as CE2B), and Selective Catalytic Reduction (SCR). Controlled emissions from Unit 2SG1 are exhausted to the atmosphere through a 19-foot diameter flue liner (Stack SV2) which is housed in a 700-foot shell that is shared by both Units 1SG1 and 2SG1. Opacity is measured with a continuous opacity monitor (COM). Sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) emissions are measured with a continuous emission monitor system (CEMS).

(The information contained in this box is descriptive information and does not constitute enforceable conditions.)

### 1. Statutory and Regulatory Authorities

In accordance with IC 13-17-3-4 and IC 13-17-3-11 as well as Titles IV and V of the Clean Air Act, the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) issues this permit pursuant to 326 IAC 2 and 326 IAC 21 (incorporates by reference 40 Code of Federal Regulations (CFR) 72 through 78).

### 2. Standard Permit Requirements [326 IAC 21]

- (a) The designated representative has submitted a complete acid rain permit application in accordance with 40 CFR 72.30.
- (b) The Permittee shall operate Units 1SG1 and 2SG1 in compliance with this permit.

### 3. Monitoring Requirements [326 IAC 21]

- (a) The Permittee and, to the extent applicable, the designated representative of Units 1SG1 and 2SG1 shall comply with the monitoring requirements as provided in 40 CFR 75 and 76.
- (b) The emissions measurements recorded and reported in accordance with 40 CFR 75 and 76 shall be used to determine compliance by Units 1SG1 and 2SG1 with the acid rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (c) The requirements of 40 CFR 75 and 76 shall not affect the responsibility of the Permittee to monitor emissions of other pollutants or other emissions characteristics at Units 1SG1 and 2SG1 under other applicable requirements of the Clean Air Act and other provisions of the operating permit for the source.

### 4. Sulfur Dioxide Requirements [326 IAC 21]

- (a) The Permittee shall:

- (1) Hold allowances, as of the allowance transfer deadline (as defined in 40 CFR 72.2), in the compliance subaccount of Units 1SG1 and 2SG1, after deductions under 40 CFR 73.34(c), not less than the total annual emissions of sulfur dioxide for the previous calendar year from Units 1SG1 and 2SG1; and,
- (2) Comply with the applicable acid rain emissions limitations for sulfur dioxide.
- (b) Each ton of sulfur dioxide emitted in excess of the acid rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Clean Air Act.
- (c) Units 1SG1 and 2SG1 shall be subject to the requirements under paragraph 4(a) of the sulfur dioxide requirements as follows:
  - (1) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or,
  - (2) Starting on the latter of January 1, 2000, or the deadline for monitor certification under 40 CFR 75, an affected unit under 40 CFR 72.6(a)(3).
- (d) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (e) An allowance shall not be deducted in order to comply with the requirements under paragraph 4(a) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (f) An allowance allocated by the U.S. EPA under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the acid rain permit application, the acid rain permit, the acid rain portion of an operating permit, or the written exemption under 40 CFR 72.7 and 72.8 and 326 IAC 21, and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (g) An allowance allocated by U.S. EPA under the Acid Rain Program does not constitute a property right.
- (h) No permit revision may be required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program, provided that the increases do not require a permit revision under any other applicable requirement. [326 IAC 2-7-5(4)(A)]
- (i) No limit shall be placed on the number of allowances held by the Permittee. The Permittee may not, however, use allowances as a defense to noncompliance with any applicable requirement other than the requirements of the Acid Rain Program. [326 IAC 2-7-5(4)(B)]
- (j) Sulfur dioxide allowances shall be allocated to each unit at the source as follows:

SO <sub>2</sub> Annual Allowance Allocations (tons)*					
	2005	2006	2007	2008	2009
Unit 1SG1	14,920*	14,920*	14,920*	14,920*	14,920*
Unit 2SG1	14,818*	14,818*	14,818*	14,818*	14,818*

\* The number of allowances allocated to Phase II affected units by U.S. EPA may change in a revision to 40 CFR 73 Tables 2, 3 and 4 and 326 IAC 21. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S.

EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO<sub>2</sub> allowance allocations identified in this permit. (See 40 CFR 72.84)

5. Nitrogen Oxides Requirements [326 IAC 21]

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(a) The Permittee shall comply with the applicable acid rain emissions limitation of nitrogen oxides (NO<sub>x</sub>) for Units 1SG1 and 2SG1.

(b) NO<sub>x</sub> Early Election Compliance Plan for Unit 1SG1:

Pursuant to 40 CFR 76.8(d)(2), the Indiana Department of Environmental Management, Office of Air Quality approves a NO<sub>x</sub> early election compliance plan for Unit 1SG1. The compliance plan is effective for calendar year 2005 through 2007. Under the compliance plan, the annual average NO<sub>x</sub> emission rate of Unit 1SG1 for each year, determined in accordance with 40 CFR 75, shall not exceed the applicable emission limitation under 40 CFR 76.5(a)(2) of 0.50 lb/MMBtu for dry bottom wall-fired boilers. If Unit 1SG1 is in compliance with its applicable emission limitation for each year of the plan, then Unit 1SG1 shall not be subject to the applicable emission limitation, under 40 CFR 76.7(a)(2), of 0.46 lb/MMBtu for dry bottom wall-fired boilers until January 1, 2008.

(c) NO<sub>x</sub> Early Election Compliance Plan for Unit 2SG1:

Pursuant to 40 CFR 76.8(d)(2), the Indiana Department of Environmental Management, Office of Air Quality approves a NO<sub>x</sub> early election compliance plan for Unit 2SG1. The compliance plan is effective for calendar year 2005 through 2007. Under the compliance plan, the annual average NO<sub>x</sub> emission rate of Unit 2SG1 for each year, determined in accordance with 40 CFR 75, shall not exceed the applicable emission limitation under 40 CFR 76.5(a)(2) of 0.50 lb/MMBtu for dry bottom wall-fired boilers. If Unit 2SG1 is in compliance with its applicable emission limitation for each year of the plan, then Unit 2SG1 shall not be subject to the applicable emission limitation, under 40 CFR 76.7(a)(2), of 0.46 lb/MMBtu for dry bottom wall-fired boilers until January 1, 2008.

(d) NO<sub>x</sub> Emission Averaging Plan for Unit 1SG1:

- (1) Pursuant to 40 CFR 76.11, the Indiana Department of Environmental Management, Office of Air Quality approves a NO<sub>x</sub> emission averaging plan for Unit 1SG1, effective from calendar year 2005 through 2007. Under the plan the NO<sub>x</sub> emissions from Unit 1SG1 shall not exceed the annual average alternative contemporaneous emission limitation (ACEL) of 0.41 lb/MMBtu. In addition, Unit 1SG1 shall not have an annual heat input less than 36,000,000 MMBtu. If Unit 1SG1 is in compliance with its applicable emission limitation for each year of the plan, then Unit 1SG1 shall not be subject to the applicable emission limitation, under 40 CFR of 0.46 lb/MMBtu for dry bottom wall-fired boilers until January 1, 2008.
- (2) Under the plan, the actual Btu-weighted annual average NO<sub>x</sub> emission rate for all the units in the plan shall be less than or equal to the Btu-weighted annual average NO<sub>x</sub> emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then Unit 1SG1 shall be deemed to be in compliance for that year with its annual ACEL and annual heat input limit.
- (3) Notwithstanding the averaging plan described above, if Unit 1SG1 exceeds its applicable NO<sub>x</sub> emission limitation under 40 CFR 76.8 (early election) of 0.50 lb/MMBtu for dry bottom wall-fired boilers, the early election plan for Unit 1SG1 shall be terminated in accordance with 40 CFR 76.8(e)(3) and Unit 1SG1 shall meet, beginning on the effective date of the termination, the applicable NO<sub>x</sub> emission limitation under 40 CFR 76.7 of 0.46 lb/MMBtu. Such termination shall not terminate the averaging plan described above

(e) NOx Emission Averaging Plan for Unit 2SG1

- (1) Pursuant to 40 CFR 76.11, the Indiana Department of Environmental Management, Office of Air Quality approves a NOx emission averaging plan for Unit 2SG1, effective from calendar year 2005 through 2007. Under the plan the NOx emissions from Unit 2SG1 shall not exceed the annual average alternative contemporaneous emission limitation (ACEL) of 0.41 lb/MMBtu. In addition, Unit 2SG1 shall not have an annual heat input less than 36,000,000 MMBtu. If Unit 2SG1 is in compliance with its applicable emission limitation for each year of the plan, then Unit 2SG1 shall not be subject to the applicable emission limitation, under 40 CFR of 0.46 lb/MMBtu for dry bottom wall-fired boilers until January 1, 2008.
  - (2) Under the plan, the actual Btu-weighted annual average NOx emission rate for all the units in the plan shall be less than or equal to the Btu-weighted annual average NOx emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then Unit 2SG1 shall be deemed to be in compliance for that year with its annual ACEL and annual heat input limit.
  - (3) Notwithstanding the averaging plan described above, if Unit 2SG1 exceeds its applicable NOx emission limitation under 40 CFR 76.8 (early election) of 0.50 lb/MMBtu for dry bottom wall-fired boilers, the early election plan for Unit 2SG1 shall be terminated in accordance with 40 CFR 76.8(e)(3) and Unit 2SG1 shall meet, beginning on the effective date of the termination, the applicable NOx emission limitation under 40 CFR 76.7 of 0.46 lb/MMBtu. Such termination shall not terminate the averaging plan described above
- (f) In addition to the described NOx compliance plan, Units 1SG1 and 2SG1 shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NOx compliance plan and requirements covering excess emissions.

6. Excess Emissions Requirements [40 CFR 77] [326 IAC 21]

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- (a) If Unit 1SG1 or 2SG1 has excess emissions of sulfur dioxide in any calendar year, the designated representative shall submit a proposed offset plan to U.S. EPA and IDEM, OAQ as required under 40 CFR 77 and 326 IAC 21.
- (b) The designated representative shall submit required information to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 46204-2251

and

Ms. Cecilia Mijares  
Air and Radiation Division  
U.S. Environmental Protection Agency, Region V  
77 West Jackson Boulevard  
Chicago, IL 60604-3590

and

U.S. Environmental Protection Agency  
Clean Air Markets Division  
1200 Pennsylvania Avenue, NW  
Mail Code (6204N)

Washington, DC 20460

- (c) If Unit 1SG1 or 2SG1 has excess emissions, as defined in 40 CFR 72.2, in any calendar year the Permittee shall:
- (1) Pay to U.S. EPA without demand the penalty required, and pay to U.S. EPA upon demand the interest on that penalty, as required by 40 CFR 77 and 326 IAC 21; and,
  - (2) Comply with the terms of an approved sulfur dioxide offset plan, as required by 40 CFR 77 and 326 IAC 21.

7. Record Keeping and Reporting Requirements [326 IAC 21]

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- (a) Unless otherwise provided, the Permittee shall keep on site each of the following documents for a period of 5 years, as required by 40 CFR 72.9(f), from the date the document is created. This period may be extended for cause, at any time prior to the end of the 5 years, in writing by U.S. EPA or IDEM, OAQ:
- (1) The certificate of representation for the designated representative of Units 1SG1 and 2SG1 and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5 year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
  - (2) All emissions monitoring information collected in accordance with 40 CFR 75 shall be retained on site for 3 years;
  - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
  - (4) Copies of all documents used to complete an acid rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (b) The designated representative of Units 1SG1 and 2SG1 shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 72.90, Subpart I, 40 CFR 75, and 326 IAC 21. The required information is to be submitted to the appropriate authority(ies) as specified in 40 CFR 72.90, Subpart I, and 40 CFR 75.

8. Submissions [326 IAC 21]

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- (a) The designated representative of Units 1SG1 and 2SG1 shall submit a certificate of representation, and any superseding certificate of representation, to U.S. EPA and IDEM, OAQ in accordance with 40 CFR 72 and 326 IAC 21.
- (b) The designated representative shall submit required information to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 46204-2251

and

U.S. Environmental Protection Agency  
Clean Air Markets Division  
1200 Pennsylvania Avenue, NW  
Mail Code (6204N)  
Washington, DC 20460

- (c) Each such submission under the Acid Rain Program shall be submitted, signed and certified by the designated representative for all sources on behalf of which the submission is made.
- (d) In each submission under the Acid Rain Program, the designated representative shall certify, by his or her signature, the following statements which shall be included verbatim in the submission:
  - (1) “I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made.”; and,
  - (2) “I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.”
- (e) The designated representative of Units 1SG1 and 2SG1 shall notify the Permittee:
  - (1) By the date of submission, of any Acid Rain Program submissions by the designated representative;
  - (2) Within 10 business days of receipt of any written determination by U.S. EPA or IDEM, OAQ; and,
  - (3) Provided that the submission or determination covers Unit 1SG1 or 2SG1.
- (f) The designated representative of Units 1SG1 and 2SG1 shall provide the Permittee a copy of any submission or determination under paragraph 8(e), unless the Permittee expressly waives the right to receive a copy.

9. Severability [326 IAC 21]

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Invalidation of the acid rain portion of an operating permit does not affect the continuing validity of the rest of the operating permit, nor shall invalidation of any other portion of the operating permit affect the continuing validity of the acid rain portion of the permit. [40 CFR 72.72(b), 326 IAC 21, and 326 IAC 2-7-5(5)]

10. Liability [326 IAC 21]

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- (a) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, an acid rain permit, an acid rain portion of an operation permit, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement by U.S. EPA pursuant to Section 113(c) of the Clean Air Act and shall be subject to enforcement by IDEM pursuant to 326 IAC 21 and IC 13-30-3.
- (b) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to Section 113(c) of the Clean Air Act, 18 U.S.C. 1001 and IDEM pursuant to 326 IAC 21 and IC 13-30-6-2.
- (c) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (d) Units 1SG1 and 2SG1 shall meet the requirements of the Acid Rain Program.
- (e) Any provision of the Acid Rain Program that applies to Unit 1SG1 or 2SG1, including a provision applicable to the designated representative of Unit 1SG1 or



2SG1 shall also apply to the Permittee.

- (f) Any provision of the Acid Rain Program that applies to Unit 1SG1 or 2SG1, including a provision applicable to the designated representative shall also apply to the Permittee. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NOx averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR 75, including 40 CFR 75.16, 75.17, and 75.18, the Permittee and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (g) Each violation of a provision of 40 CFR 72, 73, 75, 76, 77, and 78 by Unit 1SG1 or 2SG1, or by the Permittee or designated representative shall be a separate violation of the Clean Air Act.

11. Effect on Other Authorities [326 IAC 21]

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No provision of the Acid Rain Program, an acid rain permit application, an acid rain permit, an acid rain portion of an operation permit, or a written exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (a) Except as expressly provided in Title IV of the Clean Air Act (42 USC 7651 to 7651(o)), exempting or excluding the Permittee and, to the extent applicable, the designated representative of Unit 1SG1 or 2SG1 from compliance with any other provision of the Clean Air Act, including the provisions of Title I of the Clean Air Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (b) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Clean Air Act;
- (c) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;
- (d) Modifying the Federal Power Act (16 USC 791(a) et seq.) or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (e) Interfering with or impairing any program for competitive bidding for power supply in a state in which such a program is established.

## Indiana Department of Environmental Management Office of Air Quality

### Addendum to the Technical Support Document for a Renewal of Title IV (Acid Rain) Permit

Source Name: Hoosier Energy Rural Electric Cooperative (REC), Inc. –  
Merom Generating Station  
Source Location: 5500 West Old 54, Sullivan, Indiana 47882  
Mailing Address: P.O. Box 908, Bloomington, Indiana 47402  
Operated by: Hoosier Energy REC, Inc.  
ORIS Code: 6213  
Title IV Permit No.: AR 153-19646-00005  
Permit Reviewer: CLB/AKY

On November 1, 2004, the Office of Air Quality (OAQ) had a notice published in the Sullivan Daily Times, Sullivan, Indiana, stating that Hoosier Energy REC had applied for a Title IV (Acid Rain) Permit renewal for the Merom Generating Station. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed. There were no comments received on this permit during the public notice period.

Upon further review, OAQ has decided to make the following revisions to the permit (**bolded** language has been added, the language with a line through it has been ~~deleted~~).

#### Change 1:

In order to clarify the name of this permit, the title has been changed.

### **Phase II** **TITLE IV (ACID RAIN) PERMIT RENEWAL**

#### Change 2:

The location address has been corrected as follows:

Merom Generating Station  
~~State Highway 54 West~~ **5500 West Old 54**, Sullivan, Indiana 47882

#### Change 3:

To clarify the term "Permittee" the following change has been made to the cover page of the permit:

**The owners and operators (hereinafter collectively known as the Permittee) of the above source are issued** ~~This permit is issued~~ under the provisions of 326 Indiana Administrative Code (IAC) 21 with conditions listed on the attached pages.

#### Change 4:

To clarify which units are subject to Title IV regulations and to further clarify the responsibilities of the Permittee, the following changes have been made.

#### Title IV Source Description:

- |     |  |
|-----|--|
| (a) | One (1) <b>pulverized coal-fired</b> , dry bottom wall-fired boiler, identified as <del>u</del> Unit 1SG1, ( <del>referred to as u</del> Unit 1 in the Title V operating permit application), and <b>constructed in 1976, rated at 5,088</b> |
|-----|--|

million Btu per hour (MMBtu/hr) energy input, used to generate up to 490 megawatts (gross) of electricity. Unit 1SG1 uses No. 2 fuel oil for start ups and flame stabilization. Unit 1SG1 can not operate at load solely using No. 2 fuel oil. Unit 1SG1 utilizes the following control equipment: Electrostatic Precipitator (ESP), Flue Gas Desulfurization (FGD) Wet Nonregenerative Scrubber System (identified as CE1B), and Selective Catalytic Reduction (SCR). Controlled emissions from Unit 1SG1 are exhausted to the atmosphere through a 19-foot diameter flue liner (Stack SV1) which is housed in a 700-foot shell. Opacity is measured with a continuous opacity monitor (COM). Sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) emissions are measured with a continuous emission monitor system (CEMS).

- (b) One (1) **pulverized coal fired**, dry bottom wall-fired boiler identified as ~~Unit 2~~ **Unit 2SG1**, (referred to as ~~Unit 2~~ in the Title V operating permit application), **constructed in 1976, rated at 5,088 million Btu per hour (MMBtu/hr) energy input, used to generate up to 490 megawatts (gross) of electricity. Unit 2SG1 uses No. 2 fuel oil for start ups and flame stabilization. Unit 2SG1 can not operate at load solely using No. 2 fuel oil. Unit 2SG1 utilizes the following control equipment: - Electrostatic Precipitator (ESP), - Flue Gas Desulfurization (FGD) Wet Nonregenerative Scrubber System (identified as CE2B), and - Selective Catalytic Reduction (SCR). Controlled emissions from Unit 2SG1 are exhausted to the atmosphere through a 19-foot diameter flue liner (SV2) which is housed in a 700-foot stack that is shared by both Units 1SG1 and 2SG1. Opacity is measured with a continuous opacity monitor (COM). Sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) emissions are measured with a continuous emission monitor system (CEMS).**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

1. Statutory and Regulatory Authorities

In accordance with IC 13-17-3-4 ~~and IC 13-17-3-11, IC 13-17-8-1 and IC 13-17-8-2~~ as well as Titles IV and V of the Clean Air Act, the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) issues this permit pursuant to 326 IAC 2 and 326 IAC 21 (incorporates by reference 40 Code of Federal Regulations (CFR) 72 through 78).

2. Standard Permit Requirements [326 IAC 21]

- (a) The designated representative has submitted a complete acid rain permit application in accordance with ~~the deadlines in 40 CFR 72.30.~~
- (b) ~~The owners and operators of each affected source and each affected unit~~ **Permittee** shall operate ~~the unit~~ **Units 1SG1 and 2SG1** in compliance with this permit.

3. Monitoring Requirements [326 IAC 21]

- (a) ~~The owners and operators~~ **Permittee** and, to the extent applicable, the designated representative of ~~each affected source and each affected unit at the source~~ **Units 1SG1 and 2SG1** shall comply with the monitoring requirements as provided in 40 CFR 75 and 76.
- (b) The emissions measurements recorded and reported in accordance with 40 CFR 75 and 76 shall be used to determine compliance by ~~the unit~~ **Units 1SG1 and 2SG1** with the acid rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (c) The requirements of 40 CFR 75 and 76 shall not affect the responsibility of the ~~owners and operators~~ **Permittee** to monitor emissions of other pollutants or other emissions characteristics at ~~the unit~~ **Units 1SG1 and 2SG1** under other applicable requirements of the Clean Air Act and other provisions of the operating permit for the source.

4. Sulfur Dioxide Requirements [326 IAC 21]

- (a) ~~The owners and operators of each source and each affected unit at the source~~ **Permittee** shall:

- (c) ~~An affected unit~~ **Units 1SG1 and 2SG1** shall be subject to the requirements under paragraph 4(a) of the sulfur dioxide requirements as follows:
- (e) An allowance shall not be deducted in order to comply with the requirements under paragraph ~~4(a) (4)~~ of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (i) No limit shall be placed on the number of allowances held by ~~an affected source~~ **the Permittee. The Permittee** may not, however, use allowances as a defense to noncompliance with any applicable requirement other than the requirements of the Acid Rain Program. [326 IAC 2-7-5(4)(B)]
- (j) Sulfur dioxide allowances shall be allocated to each unit at the source as follows:

SO <sub>2</sub> Annual Allowance Allocations (tons) for Unit 1SG1					
year	2005	2006	2007	2008	2009
<del>Tons Unit 1SG1</del>	14,920*	14,920*	14,920*	14,920*	14,920*
SO <sub>2</sub> Allowance Allocations for Unit 2SG1					
year	2005	2006	2007	2008	2009
<del>Tons Unit 2SG1</del>	14,818*	14,818*	14,818*	14,818*	14,818*

#### 5. Nitrogen Oxides Requirements [326 IAC 21]

- (a) ~~The owners and operators of the source and each affected unit at the source~~ **Permittee** shall comply with the applicable acid rain emissions limitation ~~for of~~ nitrogen oxides (NOx) **for Units 1SG1 and 2SG1.**
- (b) NOx Early Election Compliance Plan for Unit 1SG1:
- Pursuant to 40 CFR 76.8(d)(2), the Indiana Department of Environmental Management, Office of Air Quality approves a NOx early election compliance plan for Unit 1SG1. The compliance plan is effective for calendar years ~~2000~~5 through 2007. Under the compliance plan, ~~this unit's~~ **the** annual average NOx emission rate **of Unit 1SG1** for each year, determined in accordance with 40 CFR ~~part~~ 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(2) of 0.50 lb/mmMBtu for dry bottom wall-fired boilers. If ~~the unit~~ **Unit 1SG1** is in compliance with its applicable emission limitation for each year of the plan, then ~~the unit~~ **Unit 1SG1** shall not be subject to the applicable emission limitation, under 40 CFR 76.7(a)(2), ~~or of~~ 0.46 lb/mmMBtu for dry bottom wall-fired boilers until ~~calendar year~~ **January 1, 2008.**
- (c) NOx Early Election Compliance Plan for Unit 2SG1:
- Pursuant to 40 CFR 76.8(d)(2), the Indiana Department of Environmental Management, Office of Air Quality approves a NOx early election compliance plan for Unit 2SG1. The compliance plan is effective for calendar years ~~2000~~5 through 2007. Under the compliance plan, ~~this unit's~~ **the** annual average NOx emission rate **of Unit 2SG1** for each year, determined in accordance with 40 CFR ~~part~~ 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(2) of 0.50 lb/mmMBtu for dry bottom wall-fired boilers. If ~~the unit~~ **Unit 2SG1** is in compliance with its applicable emission limitation for each year of the plan, then ~~the unit~~ **Unit 2SG1** shall not be subject to the applicable emission limitation, under 40 CFR 76.7(a)(2), ~~or of~~ 0.46 lb/mmMBtu for dry bottom wall-fired boilers until ~~calendar year~~ **January 1, 2008.**
- (d) ~~Hoosier Energy REC must annually demonstrate that this unit meets the NOx emission limit of 0.41 lb/mmBtu by showing that emissions at the common stack (through which all emissions from units 1SG1 and 2SG1 are vented) meet such limit, based upon the data from certified continuous emission monitoring systems (CEMS) at common stack S4.~~

~~GEMS certification must be performed in accordance with the requirements and specifications delineated at 40 CFR Part 75.~~

(ed) NOx Emission Averaging Plan for Unit 1SG1:

- (1) Pursuant to 40 CFR 76.11, the Indiana Department of Environmental Management, Office of Air Quality approves a NOx emissions averaging plan for ~~this unit~~ **Unit 1SG1**, effective from calendar years 2005 through 2007. Under the plan ~~this unit's~~ **the NOx emissions from Unit 1SG1** shall not exceed the annual average alternative contemporaneous emission limitation of 0.41 lb/~~mm~~MMBtu. In addition, ~~this unit~~ **Unit 1SG1** shall not have an annual heat input less than 36,000,000 ~~mm~~MMBtu. **If Unit 1SG1 is in compliance with its applicable emission limitation for each year of the plan, then Unit 1SG1 shall not be subject to the applicable emission limitation, under 40 CFR of 0.46 lb/MMBtu for dry bottom wall-fired boilers until January 1, 2008.**
- (2) Under the plan, the actual Btu-weighted annual average NOx emission rate for all the units in the plan shall be less than or equal to the Btu-weighted annual average NOx emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then Unit 1SG1 shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.
- (3) Notwithstanding the averaging plan described above, if Unit 1SG1 exceeds its applicable NOx emission limitation under 40 CFR 76.8 (early election) of 0.50 lb/MMBtu for dry bottom wall-fired boilers, the early election plan for Unit 1SG1 shall be terminated in accordance with 40 CFR 76.8(e)(3) and Unit 1SG1 shall meet, beginning on the effective date of the termination, the applicable NOx emission limitation under 40 CFR 76.7 of 0.46 lb/MMBtu. Such termination shall not terminate the averaging plan described above.

(fe) NOx Emission Averaging Plan for Unit 2SG1:

- (1) Pursuant to 40 CFR 76.11, the Indiana Department of Environmental Management, Office of Air Quality approves a NOx emissions averaging plan for ~~this unit~~ **Unit 2SG1**, effective from calendar years 2005 through 2007. Under the plan ~~this unit's~~ **the NOx emissions from Unit 2SG1** shall not exceed the annual average alternative contemporaneous emission limitation of 0.41 lb/~~mm~~MMBtu. In addition, ~~this unit~~ **Unit 2SG1** shall not have an annual heat input less than 36,000,000 ~~mm~~MMBtu. **If Unit 2SG1 is in compliance with its applicable emission limitation for each year of the plan, then Unit 2SG1 shall not be subject to the applicable emission limitation, under 40 CFR of 0.46 lb/MMBtu for dry bottom wall-fired boilers until January 1, 2008.**
- (g) (2) Under the plan, the actual Btu-weighted annual average NOx emission rate for **all** the units in the plan shall be less than or equal to the Btu-weighted annual average NOx emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, ~~except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7.~~ If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then ~~this unit~~ **Unit 2SG1** shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.
- (h) (3) Notwithstanding the averaging plan described above, if ~~the units~~ **Unit 2SG1**

exceeds ~~their~~ **its** applicable NOx emission limitation under 40 CFR 76.8 (early election) of 0.50 **lb/MMBtu** for dry bottom wall-fired boilers ~~lb/MMBtu~~, the early election plan for ~~these units~~ **Unit 2SG1** shall be terminated in accordance with 40 CFR 76.8(e)(3) and ~~the units~~ **Unit 2SG1** shall meet, beginning on the effective date of the termination, the applicable NOx emission limitation under 40 CFR 76.7 **of 0.46 lb/MMBtu**. Such termination shall not terminate the averaging plan described above.

- (if) In addition to the described NOx compliance plan, ~~the units~~ **Units 1SG1 and 2SG1** shall comply with all other applicable requirements of 40 CFR ~~part~~ 76, including the duty to reapply for a NOx compliance plan and requirements covering excess emissions.

6. Excess Emissions Requirements [40 CFR 77] [326 IAC 21]

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- (a) ~~The designated representative of an affected unit that~~ **If Unit 1SG1 or 2SG1** has excess emissions of sulfur dioxide in any calendar year, **the designated representative** shall submit a proposed offset plan to U.S. EPA and IDEM, OAQ as required under 40 CFR 77 and 326 IAC 21.
- (b) The designated representative shall submit required information to:
- Indiana Department of Environmental Management  
Air Compliance **Branch** ~~Section I~~, Office of Air Quality  
100 North Senate Avenue, ~~P.O. Box 6015~~  
Indianapolis, ~~IN Indiana 46206-6015~~ **46204-2251**
- (c) ~~The owners and operators of an affected unit that~~ **If Unit 1SG1 or 2SG1** has excess emissions, as defined in 40 CFR 72.2, in any calendar year the ~~owners and operators~~ **Permittee** shall:

7. Record Keeping and Reporting Requirements [326 IAC 21]

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- (a) Unless otherwise provided, the ~~owners and operators of the source and each affected unit at the source~~ **Permittee** shall keep on site each of the following documents for a period of 5 years, as required by 40 CFR 72.9(f), from the date the document is created. This period may be extended for cause, at any time prior to the end of the 5 years, in writing by U.S. EPA or IDEM, OAQ:
- (1) The certificate of representation for the designated representative ~~for the source and each affected unit at the source~~ **of Units 1SG1 and 2SG1** and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5 year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
- (b) The designated representative of ~~an affected source and each affected unit at the source~~ **Units 1SG1 and 2SG1** shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 72.90, Subpart I, 40 CFR 75, and 326 IAC 21. ~~Submit~~ **The required information is to be submitted** to the appropriate authority(ies) as specified in 40 CFR 72.90, Subpart I, and 40 CFR 75.

8. Submissions [326 IAC 21]

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- (a) The designated representative **of Units 1SG1 and 2SG1** shall submit a certificate of representation, and any superseding certificate of representation, to U.S. EPA and IDEM, OAQ in accordance with 40 CFR 72 and 326 IAC 21.
- (b) The designated representative shall submit required information to:

Indiana Department of Environmental Management  
Permits **Branch** ~~Administration Section~~, Office of Air Quality

100 North Senate Avenue, ~~P.O. Box 6015~~  
Indianapolis, ~~IN ndiana 46206-6015~~**46204-2251**

- (e) The designated representative of ~~a source~~ **Units 1SG1 and 2SG1** shall notify ~~each owner and operator of the source and of an affected unit at the source~~ **the Permittee**:
- (3) Provided that the submission or determination covers ~~the source or the unit~~ **Unit 1SG1 or 2SG1**.
- (f) The designated representative of ~~a source~~ **Units 1SG1 and 2SG1** shall provide ~~each owner and operator~~ **the Permittee** of an affected unit at the source a copy of any submission or determination under ~~condition~~ **paragraph 8(e)** of this section, unless the ~~owner or operator~~ **Permittee** expressly waives the right to receive a copy.

10. Liability [326 IAC 21]

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- (d) ~~Each affected source and each affected unit~~ **Units 1SG1 and 2SG1** shall meet the requirements of the Acid Rain Program.
- (e) Any provision of the Acid Rain Program that applies to ~~an affected source~~ **Unit 1SG1 or 2SG1**, including a provision applicable to the designated representative of ~~an affected source~~ **Unit 1SG1 or 2SG1**, shall also apply to the ~~owners and operators~~ **Permittee** of such source and of the affected units at the source.
- (f) Any provision of the Acid Rain Program that applies to ~~an affected unit~~ **Unit 1SG1 or 2SG1**, including a provision applicable to the designated representative of ~~an affected unit~~, shall also apply to the ~~owners and operators of such unit~~ **Permittee**. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NOx averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR 75, including 40 CFR 75.16, 75.17, and 75.18, the ~~owners and operators~~ **Permittee** and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (g) Each violation of a provision of 40 CFR ~~parts 72, 73, 74, 75, 76, 77, and 78~~ by ~~an affected source or affected unit~~ **Unit 1SG1 or 2SG1**, or by ~~an owner or operator~~ **the Permittee** or designated representative of ~~such source or unit~~, shall be a separate violation of the Clean Air Act.

11. Effect on Other Authorities [326 IAC 21]

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No provision of the Acid Rain Program, an acid rain permit application, an acid rain permit, an acid rain portion of an operation permit, or a written exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (a) Except as expressly provided in Title IV of the Clean Air Act (42 USC 7651 to 7651(o)), exempting or excluding the ~~owners and operators~~ **Permittee** and, to the extent applicable, the designated representative of ~~an affected source or affected unit~~ **Unit 1SG1 or 2SG1** from compliance with any other provision of the Clean Air Act, including the provisions of Title I of the Clean Air Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

**Change 4:**

The Technical Support Document (TSD), published November 1, 2004, is a historical document and is not changed. However, Table 3 in the Specific NOx Compliance and Averaging Plan section is incorrect. The following table replaces Table 3 from the Technical Support Document.

Table 3
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List of Sources Participating in the NO <sub>x</sub> Averaging Plan – Calendar Years 2005 to 2007	
Source Names	No. of Units
Hoosier Energy REC Merom Generating Station, IN	2
Hoosier Energy REC Frank E. Ratts Generating Station, IN	2
Total Number of Units	4



## **Indiana Department of Environmental Management Office of Air Quality**

Technical Support Document  
For a Phase II Acid Rain Permit Renewal

### **Source Background and Description**

<b>Source Name:</b>	<b>Merom Generating Station</b>
<b>Source Location:</b>	<b>State Highway 54 West</b>
<b>Mailing Address:</b>	<b>P.O. Box 908, Bloomington, Indiana, 47402</b>
<b>County:</b>	<b>Sullivan</b>
<b>Operated By:</b>	<b>Hoosier Energy REC</b>
<b>Designated Representative:</b>	<b>Fred C. Southworth</b>
<b>ORIS Code:</b>	<b>6213</b>
<b>Previous Phase II Permit No.:</b>	<b>153-5061-00005</b>
<b>Phase II Renewal Permit No.:</b>	<b>153-19646-00005</b>
<b>Permit Reviewer:</b>	<b>Cynthia Bymaster, (317) 233-2641</b>

The Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) has reviewed a Phase II Acid Rain permit renewal application submitted by (source name) on (date). The application is for the operation of the following affected units at a station located at (location address), (city), Indiana.

- (a) One (1) dry bottom wall-fired boiler identified as unit 1SG1, (referred to as unit 1 in the Title V operating permit application), and
- (b) One (1) dry bottom wall-fired boiler identified as unit 2SG1 (referred to as unit 2 in the Title V operating permit application).

This permit renewal AR 153-19646-00005 covers calendar years 2005 to 2009 involving the same affected units as indicated in the initial Phase II permit AR 153-5061-00005.

### **Existing Approvals**

The source has been operating under the following previous Phase II approvals:

- (a) AR 153-5061-00005, issued on December 31, 1997.

Hoosier Energy REC was issued a Title IV permit for the Merom Generating Station, effective from January 1, 2000 to December 31, 2004. June 24, 1997, Hoosier Energy REC submitted a Phase II NOx Compliance Plan and incorporated a new Phase II NOx Averaging Plan for the Merom Generating Station. Hoosier Energy REC, Merom Generating Station revised the Title IV Emissions Averaging Plan on November 6, 1998. Hoosier Energy REC, Merom Generating Station submitted a Phase II Acid Rain renewal application on June 28, 2004. The aforementioned revisions have been combined into this renewal permit.

### **Program Description**

The following information is provided to explain the Acid Rain Program.

- (a) **Goal of the Program**  
The goal of the 1990 Clean Air Act (CAA) Amendments, Acid Rain Program is to reduce the impact of man-made emissions of sulfur dioxide (SO<sub>2</sub>) and nitrogen oxide (NO<sub>x</sub>) on

lakes, streams, forests, crops and, most important, the health of the public, by a nationwide SO<sub>2</sub> allocation of emissions from power plants. While it may not seem to be a local problem, the information collected shows a need for this reduction. This is because these emissions can be transported great distances. Results of the SO<sub>2</sub> and NO<sub>x</sub> program, along with past, present and future plans, can be found on the Internet at <http://www.epa.gov/airmarkets/arp/>. Additional information in the form of maps showing the results of the SO<sub>2</sub> and NO<sub>x</sub> limitations can be found on the Internet at <http://nadp.sws.uiuc.edu/>.

The U.S. EPA has set a limit on the amount of sulfur dioxide emissions and the emission rate of nitrogen oxides for all regulated power plants, for each year from 2000 through 2009. The total sulfur dioxide emissions for all affected power plants in the nation have been limited to 9.4 million tons every year. That amount is 10 million tons less than the total emissions of sulfur dioxide in 1980. In 1993, U.S. EPA allocated a certain amount of sulfur dioxide emissions allowances to each power plant regulated by Phase II of the Acid Rain Program. Emissions of nitrogen oxides are being reduced by at least 2 million tons per year, by setting limits on the emission rate of nitrogen oxides from coal-fired power plant boilers.

- (b) **Federal Rules**  
The emission allowances and conditions in this draft Phase II permit were taken from the limits developed by the U.S. EPA for the Acid Rain Program pursuant to Title IV of the Clean Air Act, 42 United States Code 7401, as amended by Public Law 101-5049 (November 15, 1990). Parts 72 through 78 of Title 40 of the Code of Federal Regulations (CFR), 61 Federal Register (FR) 59142, 61 FR 67111, 61 FR 68821, and 62 FR 3463, apply to regulated power plants.
- (c) **Indiana's Rules**  
Title 326 of the Indiana Administrative Code (IAC) Article 21, Acid Deposition Control, has adopted the federal rule by referencing 40 CFR 72 through 78, 61 FR 59142, 61 FR 67111, 61 FR 68821, and 62 FR 3463. The rule incorporates the requirements of Title IV, Clean Air Act Acid Rain Program, of the 1990 Clean Air Act (CAA).
- (d) **Sulfur Dioxide (SO<sub>2</sub>) Emission Allocations**  
The sulfur dioxide allowance allocation rule (40 CFR Part 73) was revised in August 1998. The nation wide allocated sulfur dioxide emissions are 9,480,000 tons per year for 2000 through 2009. The 2010 cap is projected to reduce sulfur dioxide emissions to 8,900,000 tons per year. No allocations were made for new sources. New regulated power plants have to obtain sulfur dioxide emission allocations by purchasing them from pre-existing power plants that have received U.S. EPA allocations. A regulated power plant may have emission allocations to sell because the plant purchased newer, less polluting, equipment. The U.S. EPA keeps track of the transfer of all sulfur dioxide emission allocations in an official accounting system.
- (e) **Nitrogen Oxide Emission (NO<sub>x</sub>) Limitations**  
Pursuant to 40 CFR 76, nitrogen oxide (NO<sub>x</sub>) emission limitations are applicable only to coal-fired utility and coal-fired substitution units that are subject to Phase I and Phase II sulfur dioxide (SO<sub>2</sub>) reduction requirements.

### **Specific Sulfur Dioxide (SO<sub>2</sub>) Emission Allocations**

There are two (2) affected units, identified as Units 1SG1, and 2SG1, in this generating station. Table 1 below summarizes the SO<sub>2</sub> Allowance Allocations for these units.

Table 1					
SO <sub>2</sub> Allowance Allocations (tons/year)					
	2005	2006	2007	2008	2009
Unit 1SG1	14,920	14,920	14,920	14,920	14,920
Unit 2SG1	14,818	14,818	14,818	14,818	14,818

### Specific NO<sub>x</sub> Compliance and Averaging Plan

There are two (2) affected units, identified as Units 1SG1, and 2SG1, in this generating station. Table 2 and 3 below summarize the NO<sub>x</sub> compliance and averaging plan for these units.

Table 2			
Calendar Years 2005 thru 2007	Emission Limitation per 40 CFR 76.5, 76.6 or 76.7 (lb/MMBTU)	Alternative Limit (lb/MMBTU)	Heat Input Limit (MMBTU)
Unit 1SG1	0.50	0.41	36,000,000
Unit 2SG1	0.50	0.41	36,000,000
Calendar Years 2008 thru 2009	Emission Limitation per 40 CFR 76.5, 76.6 or 76.7 (lb/MMBTU)	Alternative Limit (lb/MMBTU)	Heat Input Limit (MMBTU)
Unit 1SG1	0.46	n/a	n/a
Unit 2SG1	0.46	n/a	n/a
The BTU weighted annual emission rate average over the units if they are operated in accordance with the proposed averaging plans = BTU weighted annual average emission rate for same units operated in compliance with 40 CFR 76 = 0.46			

Table 3			
List of Sources Participating in the NO <sub>x</sub> Averaging Plan as submitted on (date)			
Calendar Years 2005 to 2009			
Source Names	No. of Units	Source Names	No. of Units
Cayuga, IN	2	East Bend, KY	1
Edwardsport, IN	3	Miami Fort, OH	5
Gallagher, IN	4	Walter C. Beckjord, OH	6
Gibson, IN	5	Total No. of Units	32
Wabash River, IN	6	Total No. of Sources	8

### Emissions Monitoring Requirements

The owners and operators and, to the extent applicable, the designated representative for the source must comply with the monitoring requirements set out in 40 CFR 75 and 72.9(b)(1) and (2). The source must measure and record its emissions of sulfur dioxide. The source must report these measurements to IDEM and U.S. EPA. These records and reports are used to determine if the source is in compliance with the sulfur dioxide allocation program. The requirements of the Phase II permit do not affect the source's responsibility to monitor emissions of other pollutants or other emissions characteristics required by the Clean Air Act and other

operating permit provisions. Monitoring requirements outlined in the source's Phase II permit renewal application are considered as part of the Phase II renewal permit.

### **Other Record Keeping and Reporting Requirements**

The source must keep copies of all reports and compliance certifications that it submits to demonstrate compliance with the requirements of the Phase II permit for five years. The source must submit the reports and compliance certifications required by the Phase II permit to the U.S. EPA and IDEM, OAQ. Record keeping and reporting requirements outlined in the Phase II renewal application are considered part of the Phase II renewal permit.

### **Submissions**

The designated representative for each emissions unit must sign and certify every report or other submission required by the Phase II renewal permit. The designated representative must include the following certification statement in every submission:

"I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

The designated representative must send each owner and operator of the source a notification regarding every submission. The designated representative must also notify each owner and operator of the source within ten (10) business days of the receipt of any written determination made by U.S. EPA or IDEM.

### **Draft Phase II Permit Renewal**

Based on the information IDEM received from the proposed operator, IDEM has preliminarily determined that the source meets the requirement of Indiana Code (IC) 13-17-3-4, IC 13-17-3-11, IC 13-17-8-1, and IC 13-17-8-2, as well as Title IV of the Clean Air Act. IDEM proposes this draft Phase II permit renewal pursuant to 326 IAC 21.

### **Recommendation**

The staff recommends to the IDEM's Commissioner that the Title IV Acid Rain permit renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A Phase II Acid Rain permit renewal application for the purposes of this review was received on June 28, 2004.

### **IDEM Contact**

- (a) Permit  
Questions regarding the proposed Phase II renewal permit can be directed to Cynthia Bymaster at the Indiana Department Environmental Management (IDEM), Office of Air Quality (OAQ), 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana 46206-6015 or by telephone at (317) 233-2641 or toll free at 1-800-451-6027 extension 3-2641.

- (b) **Compliance Inspection**  
The source will be inspected by IDEM's compliance inspection staff. Persons seeking to obtain information regarding the source's compliance status or to report any potential violation of any permit condition should contact Dan Hancock at the Office of Air Quality (OAQ) address or by telephone at (317) 232-8429 or toll free at 1-800-451-6027 extension 232-8429.
- (c) **Copies**  
Copies of the Code of Federal Regulations (CFR) referenced in the permit may be obtained from:

Indiana Department of Environmental Management  
Office of Air Quality  
100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015

or

The Government Printing Office  
Washington, D.C. 20402

or

on the Government Printing Office website at  
<http://www.access.gpo.gov/nara/cfr/index.html>