

217-782-2113

**ACID RAIN PROGRAM  
PERMIT**

Southern Illinois Power Cooperative  
Attn: Leonard F. Hopkins, Designated Representative  
11543 Lake of Egypt Road  
Marion, Illinois

Oris No.: 976  
IEPA I.D. No.: 199856AAC  
Source/Unit: Marion/Unit 4, CFB Unit 123, Combustion Turbine (CT) Units 5 & 6  
Date Received: December 16, 2004  
Date Issued: March 21, 2005  
Effective Date: January 1, 2005  
Expiration Date: December 31, 2009

**STATEMENT OF BASIS:**

In accordance with Titles IV and V of the Clean Air Act, the Illinois Environmental Protection Agency is issuing this Acid Rain Program permit to the Southern Illinois Power Cooperative for its Marion facility.

**SULFUR DIOXIDE (SO<sub>2</sub>) ALLOCATIONS AND NITROGEN OXIDES (NO<sub>x</sub>) LIMITS FOR EACH AFFECTED UNIT:**

| CFB Unit | SO <sub>2</sub> Allowances,<br>Under Tables 2, 3, or<br>4 of 40 CFR Part<br>73* | 2005  | 2006  | 2007  | 2008  | 2009  |
|----------|---|---|-------|-------|-------|-------|
|          |   | 123   | 6,517 | 6,517 | 6,517 | 6,517 |
|          | Nitrogen Oxide<br>(NO <sub>x</sub> ) Limit                                      | These units are not subject to a NO <sub>x</sub> emissions limitation pursuant to 40 CFR Part 76. |       |       |       |       |

\* SO<sub>2</sub> allocations for Boilers 1, 2, and 3, which were repowered by new CFB Boiler 123.

| UNIT 4 | SO <sub>2</sub> Allowances,<br>under Tables 2, 3,<br>or 4 of 40 CFR<br>Part 73 | 2005  | 2006  | 2007  | 2008  | 2009  |
|--------|--|-------|-------|-------|-------|-------|
|        |  | 6,839 | 6,839 | 6,839 | 6,839 | 6,839 |

|  |                       |  |
|--|-----------------------|--|
|  | NO <sub>x</sub> Limit | 0.86 Lb/mmBtu (Standard Limit for Cyclone Fired Boilers) |
|--|-----------------------|--|

|               |  |   |      |      |      |      |
|---------------|--|---|------|------|------|------|
| CT 5 and<br>6 | SO <sub>2</sub> Allowances,<br>under Tables 2, 3,<br>or 4 of 40 CFR<br>Part 73 | 2005  | 2006 | 2007 | 2008 | 2009 |
|               |  | None  | None | None | None | None |
|               | NO <sub>x</sub> Limit  | These units are not subject to a NO <sub>x</sub> emissions limitation pursuant to 40 CFR Part 76. |      |      |      |      |

**PERMIT APPLICATION:** The permit application, which includes the NO<sub>x</sub> compliance plan, SO<sub>2</sub> allowance requirements and other standard requirements is attached and incorporated as part of this permit. The owners and operators of this source must comply with the standard requirements and special provisions set forth in the application.

**COMMENTS, NOTES, AND JUSTIFICATIONS:**

This permit contains provisions related to SO<sub>2</sub> emissions and requires the owners and operators to hold SO<sub>2</sub> allowances to account for SO<sub>2</sub> emissions from the affected units. An allowance is a limited authorization to emit up to one ton of SO<sub>2</sub> during or after a specified calendar year. Although Marion Units CT 5 and 6 are not eligible for an allowance allocated by USEPA, the owners or operators may obtain SO<sub>2</sub> allowances to cover emissions from other sources under a marketable allowance program. The transfer of allowances to and from a unit account does not necessitate a revision to the unit SO<sub>2</sub> allocations denoted in this permit (See 40 CFR 72.84).

This permit contains provisions related to NO<sub>x</sub> emissions requiring Marion Unit 4 to comply with applicable emission limitations for NO<sub>x</sub> under the Acid Rain program. Pursuant to 40 CFR 76, the Illinois EPA is approving NO<sub>x</sub> standard emission limitation compliance plan for Marion Unit 4. The compliance plan is effective for calendar years 2005 through 2009. Under the compliance plan, annual average NO<sub>x</sub> emission rate for each year for Marion Unit 4, shall not exceed the applicable emission limitation, under 40 CFR 76.6(a)(2), of 0.86 lb/million Btu for cyclone fired boilers, determined in accordance with 40 CFR Part 75.

In addition to the described NO<sub>x</sub> compliance plan, each unit shall comply with all other applicable requirements of 40 CFR Part 75 and 76, including, the duty to reapply for a NO<sub>x</sub> compliance plan, and requirements covering excess emissions.

This permit does not affect the source's responsibility to meet all other applicable local, state and federal requirements, including state requirements under 35 Ill. Adm. Code Part 217 Subpart W, which addresses NO<sub>x</sub> emissions from Marion Units, Unit 4, CFB Unit 123, and Combustion Turbine (CT) Units 5 and 6.

If you have any questions regarding this permit, please contact Kunj Patel at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permits Section  
Division of Air Pollution Control

cc: Cecilia Mijares, USEPA Region V

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John Justice, IEPA Region 3



SOUTHERN IL. POWER COOP.  
Plant Name (from Step 1): MARION STATION

STEP 3

Read the  
standard  
requirements

**Permit Requirements**

- (1) The designated representative of each affected source and each affected unit at the source shall:
  - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30, and
  - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
  - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
  - (ii) Have an Acid Rain Permit.

**Monitoring Requirements**

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristic at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

**Sulfur Dioxide Requirements**

- (1) The owners and operators of each source and each affected unit at the source shall:
  - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(e)), or in the compliance subaccount of another affected unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
  - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.8(a)(1); or
  - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.8(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

SOUTHERN ILLINOIS POWER COOP.  
Plant Name (from Step 1): MARION STATION

Acid Rain - Page 3

STEP 3,  
Cont'd.

**Nitrogen Oxides Requirements** The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

**Excess Emissions Requirements**

- (1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
  - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

**Recordkeeping and Reporting Requirements**

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
  - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
  - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and
  - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

**Liability**

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

SOUTHERN ILLINOIS POWER CO. MARION STATION

Step 3, Cont'd.

Liability, Cont'd.

- (5) Any provision of the Acid Rain Program that applies to an affected source... (6) Any provision of the Acid Rain Program that applies to an affected unit... (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit...

Effect on Other Authorities

- No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as: (1) Except as expressly provided in title IV of the Act... (2) Limiting the number of allowances a unit can hold... (3) Requiring a change of any kind in any State law... (4) Modifying the Federal Power Act... (5) Interfering with or impairing any program for competitive bidding...

STEP 4

Certification

Read the certification statement, sign, and date

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

Signature: LEONARD F. HOPKINS, P.E. Date: 5/20/04



# Phase II NO<sub>x</sub> Compliance Plan

For more information, see instructions and refer to 40 CFR 75.9

This submission is:  New  Revised

**STEP 1**  
Indicate plant name, date, and OMB code from NADB, if applicable

|   |                |
|---|----------------|
| Plant Name: <b>SOUTHERN IL. POWER COOPERATIVE</b> | I: <b>0976</b> |
| Plant Name: <b>MARION STATION</b>                 | Date: OMB Code |

**STEP 2**

Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DB" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit.

|                |                |      |      |      |      |
|----------------|----------------|------|------|------|------|
| ID# <b>4</b>   | ID# <b>123</b> | ID#  | ID#  | ID#  | ID#  |
| Type <b>CY</b> | Type           | Type | Type | Type | Type |

|   |                                     |                          |                          |                          |                          |                          |
|---|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| (a) Standard annual average emission limitation of 0.25 lb/MMBtu for Phase I dry bottom wall-fired boilers  | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (b) Standard annual average emission limitation of 0.45 lb/MMBtu for Phase I tangentially fired boilers   | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (c) EPA-approved early election plan under 40 CFR 75.9 through 12/31/97 plus in-charge state emission limit specified in plan   | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (d) Standard annual average emission limitation of 0.45 lb/MMBtu for Phase I dry bottom wall-fired boilers  | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (e) Standard annual average emission limitation of 0.45 lb/MMBtu for Phase II tangentially fired boilers  | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (f) Standard annual average emission limitation of 0.35 lb/MMBtu for cell burner boilers  | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (g) Standard annual average emission limitation of 0.35 lb/MMBtu for cyclone boilers  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (h) Standard annual average emission limitation of 0.45 lb/MMBtu for vertically fired boilers   | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (i) Standard annual average emission limitation of 0.34 lb/MMBtu for wet bottom boilers   | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (j) NO <sub>x</sub> Averaging Plan (Include NO <sub>x</sub> Averaging Plan)   | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (k) Common stack pursuant to 40 CFR 75.17(a)(2)(ii)(A) (Check the standard emission limitation box above for most stringent limitation applicable to any unit within stack) | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (l) Common stack pursuant to 40 CFR 75.17(a)(2)(ii)(B) (Check NO <sub>x</sub> Averaging Plan box and include NO <sub>x</sub> Averaging Plan)                                | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**Southern IL Power Cooperative**  
 Plant Name (from permit) **MISSION STATION**

**STEP 2, cont'd.**

|                |                |      |      |      |      |
|----------------|----------------|------|------|------|------|
| ID# <b>4</b>   | ID# <b>123</b> | ID#  | ID#  | ID#  | ID#  |
| Type <b>CY</b> | Type           | Type | Type | Type | Type |

|   |                          |                                     |                          |                          |                          |                          |
|---|--------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| (iv) EPA approved common stack apportionment method pursuant to 40 CFR 14.17 (a)(2)(i)(C), (a)(2)(i)(B), or (ii)(2) | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (v) AEL (include Phase I AEL, Demonstration Period, Final AEL, Petition, or AEL Renewal form as appropriate)        | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (vi) Petition for AEL, Demonstration period, or Final AEL, under review by USEPA or demonstration period ongoing    | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (vii) Representing emissions plan approved or under review  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**STEP 3**  
 Read the standard requirements and verify whether, under the name of the designated representative, sign &

**Standard Requirements**

**General:** This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 72.9a)(1)(C). These requirements are listed in this source's Acid Rain Permit.

**Special Provisions for Early Election Units**

**Minimum Cycles:** A unit that is governed by an approved early election plan shall be subject to emissions limitation for NO<sub>x</sub>, as provided under 40 CFR 75.6(a)(2) except as provided under 40 CFR 75.6(a)(3)(ii).

**Liability:** The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 75.6 of that unit. The owners and operators shall be liable, beginning January 1, 2001, for fulfilling the obligations specified in 40 CFR Part 77.

**Termination:** An approved early election plan shall be in effect only until the earlier of January 1, 2006 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 75.6 for any year during the period beginning January 1 of the first year the early election plan takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The new emissions limitation will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.9(a)(2) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2008, the unit shall meet, beginning January 1, 2008, the applicable emissions limitation for NO<sub>x</sub>, for Phase II units with Group 1 boilers under 40 CFR 75.7. If an early election plan is terminated on or after 2008, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO<sub>x</sub>, for Phase II units with Group 1 boilers under 40 CFR 75.7.

**Certification**

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally reviewed, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my knowledge and information submitted in this document and all its attachments, 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 fines or imprisonment.

Name **LEONARD E. HOPKINS, P.E.**  
 Signature *Leonard E. Hopkins* Date **5/28/04**