



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

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February 27, 2008

Mr. Darrell Bayless
Hoosier Energy Rural Electric Cooperative - Ratts Generating Station
P. O. Box 908
Bloomington, IN 47402

Re: Approval for an Experimental Trial
No. 125-26096-00001

Dear Mr. Bayless:

On February 13, 2008, Hoosier Energy Rural Electric Cooperative - Ratts Generating Station submitted a letter informing the Office of Air Quality (OAQ) of the intention to conduct an experimental trial operation on Unit 1, to be conducted by using a Mobotec sorbent injection system to reduce SO2 emissions and upgrading the existing electrostatic precipitator to control the resulting increase in PM emissions. The trial will be conducted while burning coal and hydrated lime, with a sulfur content capable of producing 2.5 pounds of SO2 per million BTU. Pursuant to a variance issued to Hoosier Energy - Frank E. Ratts Generating Station on February 21, 2008, Unit 1 has a variance from the opacity limit in 326 IAC 5-1-2 and the PM limit in 326 IAC 6-2-3 and this variance will be in effect during the time of the experimental trial testing.

Experimental Trial General Information

Unit: Unit 1 - temporary sorbent injection system (Mobotec) and upgraded electrostatic precipitator (ESP)
Location of the Operation: 6825 N. Blackburn Road, Petersburg, IN 47567
County: Pike
County Status: Attainment for all criteria pollutants
Purpose of the Experimental Trial: To evaluate SO2 and PM emissions and opacity using the Mobotec sorbent injection system and upgraded ESP while burning coal and hydrated lime, with a sulfur content producing 2.5 pounds of SO2 per MMBTU
Starting Date of the Operation: March 18, 2008 [326 IAC 2-1.1-3(h)(3)(F)]
Duration of the Operation: Less than 30 days of total operating time
Testing parameters: SO2 and PM emissions, opacity readings

Applicable Requirements

Pursuant to 326 IAC 2-1.1-3(h) (Exemption for Experimental Trial), the above mentioned experimental trial shall satisfy the following requirements:

- 1. The potential emissions from the operation are less than 25 tons per year for the duration of the operation. [326 IAC 2-1.1-3(h)(3)(A)]



2. The operation is not a major source or modification as defined under 326 IAC 2-2, or 326 IAC 2-7. [326 IAC 2-1.1-3(h)(3)(B)]
3. The purpose of the experimental trial is to:
  - (a) collect data for experimental purposes, including, but not limited to, process improvements, new product development, and pollution prevention; or [326 IAC 2-1.1-3(h)(3)(C)(i)]
  - (b) temporarily conduct an operation not considered as part of the normal operation or production of the facility or source. [326 IAC 2-1.1-3(h)(3)(C)(ii)]
4. The duration of the experimental trial is less than 30 days of total operating time. [326 IAC 2-1.1-3(h)(3)(D)]
5. The Permittee shall submit a report containing the following information, at most seven (7) days after the conclusion of the experimental trial: [326 IAC 2-1.1-3(h)(3)(G)]
  - (a) The actual dates of the construction and operation.
  - (b) The duration of the operation.
  - (c) The actual emissions occurring during the operation.
6. The report shall be submitted to:  
Indiana Department of Environmental Management  
Office of Air Quality, Permits Branch  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

#### Expiration Date

The approval for the Experimental Trial expires after 30 days of actual operating time of the Mobotec system on Unit 1 while burning coal and hydrated lime, producing 2.5 pounds of SO<sub>2</sub> per million BTU.

#### IDEM Contact

If you have any questions regarding this approval, please contact Josiah Balogun of my staff at the Indiana Department Environmental Management, Office of Air Quality, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5257 or toll free at 1-800-451-6027 extension 4-5257.

Sincerely,  
*Original signed by*  
Matthew Stuckey, Deputy Branch Chief  
Permits Branch  
Office of Air Quality

Enclosure: Experimental Trial Report

cc: File – Pike County

Pike County Health Department  
Air Compliance Inspector - Southwest Regional Office

**Indiana Department of Environmental Management**  
**Office of Air Quality, Permits Branch**  
**100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, IN 46204-2251**

**Experimental Trial Report**

Source Name: Hoosier Energy REC - Ratts Generating Station  
Source Location: 6825 N. Blackburn Road, Petersburg, IN 47567  
County Location: Pike  
Experimental Operation: 125-26096-00001

Experimental Trial	
Type of unit/operation:	
Actual starting date of the construction:	
Actual ending date of the construction:	
Actual starting date of the operation:	
Actual ending date of the operation:	
Actual number of days of the operation:	
Calculated emissions during the duration of the operation:	
Additional Comments:	

I certify under penalty of law that this report was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

cc: Air Compliance Inspector - Southwest Regional Office