COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES CENTRAL OFFICE

AIR QUALITY CONTROL 400 MARKET STREET

HARRISBURG, PENNSYLVANIA 17105-8468

PLAN APPROVAL

Permit No.: PA-17-0001 Source(s): Pulverized coal-fired

boilers Units 1 - 4, Diesel units 5 - 7, and miscellaneous sources as described

herein

Owner: Pennsylvania Electric Co. Air:

Cleaning: (Un: Devices: Low

Low NOx Burners (Units 1 and 2) Low NOx Burners w/

separated overfire air (Units 3 and 4)

Address: 1001 Broad Street

Johnstown, PA 15907

Location:

Shawville Generating

Bradford Twp. Clearfield Co.

Attention: Mr. T. E. McKenzie

Environmental Air Manager

Accordance with provisions of the air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and after due consideration of an application received under Chapter 127 of the rules and regulations of the epartment of Environmental Resources, the Department on 12/27/94 pproved plans for the installation of an air cleaning device on the existing boilers, and for the implementation of Reasonably Available Control Technology requirements.

This PLAN APPROVAL expires 6/27/96.

The plan approval is subject to the following conditions:

- The air cleaning device is to be installed in accordance with the plans submitted with the application (as approved herein.)
- Upon completion of the implementation of RACT control measures a operating permit must be obtained.

See attached for additional conditions.

James Salvaggio

Director

Bureau of Air Quality Control

cc:Northcentral Regional Office File

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3. This Plan Approval is for the installation of Low NOx burners on Unit 2, Low NOx burners with separated overfire air on Unit 3 (LNCFSIII) and Reasonably Available Control Technology (RACT) determinations on Units 1 through 4, Diesel units 5-7, 2 emergency generators, a fire pump powered by 2 diesels and 15 space heaters. This plan approval supersedes all previous plan approvals issued for units 1 through 4. The following is a list of previously issued plan approvals for the facility:

(a) 17-306-001A Installation low NOx Burners Unit 1

- (b) 17-306-001B Installation of a sulfur trioxide/ammonia flue gas conditioning system on Units 1 and 2.
- (c) 17-306-002C Installation of low NOx Burners with separate overfire air on Unit 4
- (d) 17-306-002E Installation of low NOx Burners with separate overfire air on Unit 3
- Following the installation of the sulfur trioxide/ammonia flue gas conditioning system on units 1 and 2, the ammonia (NH3) emission rate from units 1 and 2 shall not exceed 0.003 lbs/MMBTU of heat input.
- No reclaimed or waste oil or oil that contains any waste material shall be used as fuel in the lighter associated with the low NOx burners.
- 6. The applicant shall perform stack testing on Unit 1 or 2 and on Unit 3 or 4 no later than one hundred-eighty (180) days after completing the installation of the low NOx burner system to determine carbon monoxide (CO) and volatile organic compound (VOC) emission rates from the unit. The tests shall be conducted while the source is operating at the maximum rated capacity as stated in the application. The Department reserves the right to require testing on the untested units based on the results of testing performed.
- Stack testing shall be performed in accordance with 25 PA Code Chapter 139 regulations and the Department's Source Testing Manual.
- 8. At least sixty (60) days prior to the tests required by Condition #6, pre-test protocol shall be submitted to the Department for review.
- 9. Within sixty (60) days of the completion of the tests required by Condition #6, two copies of the test report shall be submitted to the Department.
- 10. The Department shall be given at least 10 days advance notice of the scheduled dates for the performance of the testing required by Condition #6.
- PENELEC shall implement the RACT plan in accordance the with schedule contained in the RACT proposal.

UNIT 1: Completed 12/25/93

UNIT 2: Scheduled completion 3/5/95 UNIT 3: Scheduled completion 12/19/94

UNIT 4: Completed 5/7/94

The installation of RACT controls shall be as expeditious as possible, but no later then May 31, 1995.

7. The following NOx RACT emission limits shall apply:

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UNIT 1: 0.5 lb/MMBTU thirty day rolling average.
UNIT 2: 0.5 lb/MMBTU thirty day rolling average.
UNIT 3: 0.45 lb/MMBTU thirty day rolling average.
UNIT 4: 0.45 lb/MMBTU thirty day rolling average.

The final NOx RACT emission limits shall be established based on CEM data and will be incorporated in the Operating Permit.

- VOC RACT for Units 1 through 4 is the installation, operation and maintenance of the source in accordance with manufacturers' recommendations.
- 14. RACT for diesel units 5 through 7 shall be the installation, maintenance and operation of the source in accordance with the manufacturers' specifications. The annual capacity factor of these units shall be less than 5%.
- 15. RACT for the emergency generators and the fire pump powered by 2 diesels shall be the installation, maintenance and operation of the sources in accordance with manufacturers' specifications. These units shall be operated less than 500 hours in a consecutive 12-month period.
- RACT for the 15 space heaters shall be the installation, maintenance and operation of the sources in accordance with manufacturers' specifications.
 - The company shall maintain records in accordance with the record keeping requirements for 25 PA Code Section 129.95 and shall include as a minimum the following:
 - (a) Data which clearly demonstrates that the emission limits in condition 12 are met.
 - (b) Data which clearly demonstrates that the annual capacity factors of diesel units 5 through 7 are less than 5%.
 - (c) Data which clearly demonstrates that the operating hours of the emergency generators and the fire pump powered by 2 diesels shall be less than 500 hours in a consecutive 12-month period.
- 18. The applicant shall operate and maintain a continuous nitrogen oxides emission monitoring system on Units 1 through 4 in accordance with all applicable requirements specified in, or established pursuant to, the Rules and Regulations of the Department of Environmental Resources, as well as continue to monitor opacity and sulfur oxides in accordance with all applicable requirements specified in, or established pursuant to, the Rules and Regulations of the Department of Environmental Resources and the Department's "Continuous Source Monitoring Manual."
- 19. This Plan Approval authorizes temporary operation of the sources covered by this Plan Approval provided the following conditions are met.
 - a. The Department must receive written notice from the Owner/Operator of the completion of construction and the operator's intent to commence operation at least five (5) working days prior to completion of construction. The notice shall state when construction will be completed and when Operator expects to commence operation.

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- b. Operation is authorized only to facilitate the start-up and shake-down of sources and air cleaning devices, to permit operations pending the issuance of an Operating Permit or to permit the evaluation of the source(s) for compliance with all applicable regulations and requirements.
- c. This condition authorizes temporary operation of the source(s) for a period of 180 days from the date of commencement of operation, provided the Department receives notice from the Owner/Operator pursuant to subpart (a), above.
- d. The Owner/Operator may request an extension if compliance with all applicable regulations and Plan Approval requirements has not been established. The extension request shall be submitted in writing at least 15 days prior to the end of this period of temporary operation and shall provide a description of the compliance status of the source, a detailed schedule for establishing compliance, and the reasons compliance has not been established.
- e. The notice submitted by the Owner/Operator pursuant to subpart (a), above, prior to the expiration of this Plan Approval, shall modify the Plan Approval expiration date. The new Plan Approval expiration date shall be 180 days from the date of the written notice.
- Any notification required as a result of any condition herein should be directed to Richard L. Maxwell, Jr., Chief Engineering Services, 200 Pine Street, Williamsport, PA 17701-6510, telephone (717) 327-3641.