



**CITY OF PHILADELPHIA  
DEPARTMENT OF PUBLIC HEALTH  
AIR MANAGEMENT SERVICES  
RACT PLAN APPROVAL**

Effective Date: February 9, 2016

Expiration Date: None

Replaces Permit No. PA Permit Number 51-4903 dated 7/11/01

In 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 a Reasonably Available Control Technology (RACT) proposal received under the Pennsylvania Code, Title 25, Chapter 129.91 thru 129.95, of the rules and regulations of the Pennsylvania Department of Environmental Protection (PADEP), Air Management Services (AMS) approved the RACT proposal of the Facility below for the source(s) listed in section 1.A. Emission Sources of the attached RACT Plan Approval.

Facility: Exelon Generation Company - Richmond Generating Station

Owner: Exelon Generation Company

Location: 3901 North Delaware Avenue, Philadelphia, PA 19137

Mailing Address: 300 Exelon Way, Kennett Square, PA 19348

SIC Code(s): 4911

Plant ID: 4903

Facility Contact: Dale Davis

Phone: (215) 831-7606 (office)

(267) 207-1244 (cell)

Permit Contact: Albert M. Hatton III

Phone: (610) 765-5495

Responsible Official: Paul Weeks

Title: General Manager

A handwritten signature in blue ink, appearing to read "Edward Wiener".

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Edward Wiener, Chief of Source Registration

2/9/2016

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Date

**The RACT Plan Approved is subject to the following conditions:**

1. The purpose of this Plan Approval is to establish Nitrogen Oxides (NOx) Reasonably Available Control Technology (RACT) for PECO – Richmond (Exelon). This includes the following emission sources and control equipment:

A. Emission Sources

(1) Two General Electric Frame 7B combustion turbines, each burns #2 oil and kerosene. The nominal output for each is 66 MW.

2. This Plan Approval authorizes:

A. The implementation of the following operational limitations on the two Richmond combustion turbines to comply with the case-by-case determination in the RACT proposal submitted by PECO Energy Co. (Exelon):

(1) Maximum 12-month rolling capacity factor less than 15% for each combustion turbine.

The rolling 12-month capacity factor is expressed as:

$$\frac{\text{Last 12 months net generation (MWH)}}{\text{-----}}$$

$$\text{Maximum capacity of unit (MW) x 24 hrs/day x No. of days in last 12 months}$$

(2) The installation, maintenance and operation of the combustion turbines in accordance with manufacturers specifications.

3. RACT Implementation Schedule

A. Upon issuance of this Plan Approval, PECO (Exelon) shall begin immediate implementation of the measures necessary to comply with the approved RACT proposal.

4. Monitoring Requirements

A. Combustion Turbines: Daily fuel usage, and net generation for each combustion turbine on a monthly basis. Rolling 12-month capacity factor for each combustion turbine, calculated on a monthly basis.

B. Exelon – Richmond shall perform an AMS-approved stack test on one combustion turbine every 5 years to demonstrate compliance with the NOx emission limits in Condition 5.A. If the test results are above 0.34 lbs/MMBTU or 284.92 lbs/hr (50% of the limits), the other combustion turbine shall also be tested during that 5-year period.

5. Emission Limitations
  - A. Each combustion turbine listed 1.A.(1) above shall limit its NO<sub>x</sub> emissions to no more than 0.68 pounds per MMBtu and 569.84 pounds per hour.
  
6. Recordkeeping and Reporting Requirements
  - A. PECO - Richmond shall maintain a file containing all the records and other data that are required to be collected to demonstrate compliance with NO<sub>x</sub> RACT requirements of 25 PA Code SS129.91-129.94. These records shall include records of the monitoring requirements of this Plan Approval.
  - B. The records shall provide sufficient data and calculations to clearly demonstrate that the requirements of SS129.91-129.94 are met.
  - C. Data of information required to determine compliance shall be recorded and maintained in a time frame consistent with the averaging period of the requirement.
  - D. Records shall be retained for at least five years and shall be made available to AMS on request.
  
7. The operation of the aforementioned combustion turbines shall not at any time result in the emission of visible air contaminants in excess of the limitations specified in Section 123.41, particulate matter in excess of the limitations specified in Section 123.11 or sulfur oxides in excess of the limitations specified in Section 123.22, all Sections of Chapter 123 of Article III of the Rules and Regulations of the Department of Environmental Resources, or in the emission of any of these or any other type of air contaminant in excess of the limitations specified in, or established pursuant to, any other applicable rule or regulation contained in Article III.
  
8. The company shall not impose conditions upon or otherwise restrict AMSs access to the aforementioned source(s) and/or any associated air cleaning device(s) and shall allow AMS to have access at any time to said source(s) and associated air cleaning device(s) with such measuring and recording equipment, including equipment recording visual observations, as AMS deems necessary and proper for performing its duties and for the effective enforcement of the Air Pollution Control Act.
  
9. Revisions to any emission limitations incorporated in this Plan Approval will require resubmission as revision to the PA State Implementation Plan. The applicant shall bear the cost of public hearing and notification required for EPA approval as stipulated in 25 PA Code Section 129.91(h).