

APPENDIX B

Consent Order and Agreements, Orders, Permits and Plan Approvals

Bureau of Air Quality Department of Environmental Protection [This page intentionally left blank.]



APPENDIX B-1

Redacted Order for Conemaugh

Bureau of Air Quality Department of Environmental Protection [This page intentionally left blank.]

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Via Certified Mail # 7003 2260 0000 3139 7803

In The Matter Of:

Genon NE Management Co.	:	SO ₂ 1 hour NAAQS
Conemaugh Plant	:	Nonattainment;
121 Champion Way	:	Indiana County and
Canonsburg, PA 15317-5817	;	Portions of Armstrong County

ORDER

NOW THIS 1 day of October, 2017, the Commonwealth of Pennsylvania,

Department of Environmental Protection ("Department" or "DEP") has made and determined the following FINDINGS and enters the following ORDER:

FINDINGS

The Department has found and determined the following:

A. The Department is the agency with the duty and authority to administer and enforce the Air Pollution Control Act, Act of January 8, 1960, P.L. 2119 (1959), *as amended*, 35 P.S. § 4001 *et seq*. ("APCA"); Section 1917-A of the Administrative Code of 1929, Act of April 9, 1929, P. L. 177, *as amended*, 71 P.S. § 510-17; and the rules and regulations promulgated thereunder.

B. Genon NE Management Company ("Genon NE") operates as a subsidiary of NRG Energy, Inc. ("NRG"), who is authorized to do business in Pennsylvania, with a mailing address of 121 Champion Way, Canonsburg, PA 15317-5817.

C. Genon NE owns the Conemaugh Plant, a coal-fired, steam electrical generation station located at 1442 Power Plant Road, Route 208, New Florence PA 15944 in West Wheatfield Township, Indiana County. D. The Conemaugh Plant is presently covered by Title V Operating Permit No. 32-00059, which expires on October 28, 2020.

E. The Conemaugh Plant presently includes the following sources of SO₂ emissions ("SO₂ Emitting Sources"):

Boiler 1 (Source ID 031) nominally rated at 8,060 MMBTU/HR; and

Boiler 2 (Source ID 032) nominally rated at 8,060 MMBTU/HR.

F. Each of the SO₂ Emitting Sources described in Paragraph E, above, is an air contamination source as that term is defined in Section 3 of the APCA, 35 P.S. § 4003.

Background of Requirements for Commonwealth to Submit Revision to State Implementation Plan (SIP):

G. On June 22, 2010, the United States Environmental Protection Agency ("EPA") promulgated a revised primary (health-based) national ambient air quality standard ("NAAQS") for Sulfur Dioxide (SO₂). See 75 FR 35520, June 22, 2010 (hereinafter "2010 1-Hour SO₂ NAAQS"). Specifically, the EPA established a new 1-hour standard at a level of 75 parts per billion (ppb), which is met at an ambient air quality monitoring site when the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations is less than or equal to 75 ppb. These revised SO₂ standards became effective on August 23, 2010.

H. On August 5, 2013, at 78 FR 47191, the EPA designated all of Indiana County and Plumcreek Township, South Bend Township, and Elderton Borough in Armstrong County as being in nonattainment for the 2010 1-Hour SO₂ NAAQS ("Indiana Nonattainment Area"). The designations took effect October 4, 2013.

I. Pursuant to Section 191 of the Clean Air Act ("CAA"), 42 U.S.C. § 7514, the Commonwealth of Pennsylvania was required to develop and submit to EPA a State Implementation Plan revision ("SIP revision") to address the Indiana Nonattainment Area within

18 months (April 4, 2015) from the effective date of the 2010 1-Hour SO₂ NAAQS nonattainment designations. Specific statutory requirements for a SIP submittal can be found in Section 172(c) of the CAA. 42 U.S.C. § 7502(c).

J. On March 18, 2016, effective April 18, 2016, the EPA published a final action to find that Pennsylvania failed to submit a SIP to satisfy nonattainment area planning requirements of the CAA for the 2010 1-Hour SO₂ NAAQS. 81 FR 14736. *See also* 81 FR 22025 (April 14, 2016). (This action corrects that listing to clarify that the Indiana, Pennsylvania nonattainment area for the 2010 SO₂ NAAQS consists of the entirety of Indiana County and part of Armstrong County.) The EPA's findings of "failure to submit" triggered deadlines for the EPA to impose sanctions if Pennsylvania does not submit a SIP addressing those requirements and for the EPA to promulgate a Federal Implementation Plan ("FIP") to address any outstanding SIP requirements.

K. If a state has not submitted a SIP revision and the EPA has not found it to be complete on or before 18 months (Oct. 18, 2017) after the effective date of the findings, the offset sanctions identified under Section 179(b)(2) and 40 C.F.R. § 52.31(d) will apply. If a state has not submitted a SIP Revision and the EPA has not found it to be complete on or before 24 months (April 18, 2018) after the effective date of the findings, highway funding sanctions identified under Section 179(b)(1) and 40 C.F.R. § 52.31(d) will apply. Additionally, such a finding also triggers an obligation under CAA Section 110(c)(1)(A) for the EPA to promulgate a FIP no later than 2 years from the finding of failure to submit, if the affected state has not submitted, and the EPA has not approved, the required SIP submittal.

L. The SIP revision is subject to a public comment period and opportunity for a public hearing.

M. Because the SO₂ Emitting Sources are point sources located in the Indiana Nonattainment Area with SO₂ emissions that could potentially contribute to nonattainment of the area, they were included in atmospheric dispersion modeling for demonstration of attainment per Appendix W to 40 C.F.R. Part 51 and in accordance with Guidance for 1-Hour Sulfur Dioxide Nonattainment Area State Implementation Plans (SIP) Submissions.

N. On behalf of Genon NE and three other NRG-operated power plants in the Indiana Nonattainment Area (Seward Generating Station, Keystone Generating Station and Homer City Generating Station), NRG has caused air dispersion modeling to be performed for the Indiana Nonattainment Area in two ways:

1. Using the guideline model AERMOD ("AERMOD Modeling"); and

2. Using the guideline model AERMOD together with AIRMOIST software ("AERMOD/AIRMOIST Modeling").

O. DEP has reviewed the modeling for the Indiana Nonattainment Area. Both the AERMOD Modeling and AERMOD/AERMOIST Modeling, identified in Paragraph N, above, show that the Indiana Nonattainment Area would achieve modeled attainment of the 2010 1-hour SO₂ NAAQS with the current SO₂ emissions limitations for the Homer City SO₂ Emitting Sources, the Conemaugh SO₂ Emitting Sources, and the Seward SO₂ Emitting Sources. The AERMOD Modeling and AERMOD/AERMOIST Modeling show that changes to the currently permitted emissions limits for the Keystone Station are needed to achieve modeled attainment of the 2010 1-hour SO₂ NAAQS.

P. Both the AERMOD Modeling and AERMOD/AERMOIST Modeling will be included in the SIP revision. The EPA is expected to accept only one of these models.

Q. Contingency measures are a required component of the SIP revision pursuant to Section 172(c)(9) of the CAA.

 R. Based upon the modeling identified in Paragraph N, above, the emission limits for the Conemaugh Plant do not change from the limits specified in Title V Operating Permit No.
32-00059.

<u>ORDER</u>

NOW THERFORE, pursuant to Sections 4(9) and 10.1 of the APCA, 35 P.S. §§ 4004(9) and 4010.1, and Section 1917-A of the Administrative Code, 71 P.S. § 510-17, the Department orders that:

1. Contingency Measures.

a. Upon execution of this Order, if SO₂ emissions from the combined SO₂ Emitting Sources at the Conemaugh Plant exceed 99% of the SO₂ emission limits set forth in Title V Operating Permit No. 32-00059, Genon NE shall, within 48 hours, undertake a full- system audit of the SO₂ Emitting Sources, and will submit a written report to the Department within 15 days. A malfunction report prepared pursuant to Title V Operating Permit 32-00059, Section C, Condition 017 shall satisfy this requirement. The full system audit shall consist of a review of the parameters routinely monitored by the Continuous Emissions Monitoring Systems and the Digital Data Acquisition Systems installed on the SO₂ Emitting Sources and their control devices to determine whether or not the units and control devices were operating in accordance with specifications set forth in the approved plan approval application and good air pollution control practices. If the SO₂ Emitting Sources and their control devices were not operating in accordance with specifications set forth in the approved plan approval application and good air pollution control practices, then Genon NE shall identify corrective actions to be implemented to ensure

that the limits in Title V Operating Permit No. 32-00059 are not exceeded. Only one audit in a seven-operating day period is required if combined SO₂ emissions from the SO₂ Emitting Sources exceed 99% of the SO₂ emission limits in Title V Operating Permit No. 32-00059. The audit and associated records shall be maintained on site.

Upon execution of this Order, if the Strongstown monitor (AIRS ID 42b. 063-0004) measures a 1-hour concentration exceeding 75 ppb (which constitutes a daily exceedance of the 1-hour SO₂ NAAQS), the Department will notify Genon NE both verbally and in writing. Genon NE shall identify whether any of the SO₂ Emitting Sources at the Conemaugh Plant were running at the time of the exceedance, and/or within a reasonable time period leading up to the exceedance, not to exceed 24 hours. If any of the SO₂ Emitting Sources at the Conemaugh Plant were running at the time of the exceedance, and/or within a reasonable time period leading up to the exceedance, not to exceed 24 hours, Genon NE must then analyze the meteorological data on the day the daily exceedance occurred to ensure that the daily exceedance was not due to SO₂ emissions from the Conemaugh Plant. The meteorological data analysis should include trajectories run at three different heights (one at stack height and two more within the boundary layer) by the National Oceanic and Atmospheric Administration's Hysplit program or an equivalent program, and an analysis of Johnstown Airport's meteorological data and modeled upper air data using the National Weather Service's Bufkit or equivalent program. The overall goal of the meteorological data analysis is to investigate if emissions from any of the SO_2 Emitting Sources at the Conemaugh Plant could have potentially mixed down to the Strongstown SO₂ monitor. Genon NE's finding must be submitted in writing to the Department within 30 days of being notified of the exceedance. In lieu of performing this meteorological analysis for the Conemaugh Plant alone, meteorological analysis for Genon NE and one or more of the power

plants in the Indiana Nonattainment Area may be submitted, provided that the analysis is designed to investigate if emissions from the Conemaugh Plant could have potentially mixed down to the Strongstown SO₂ monitor.

2. Title V. Within six (6) months of US EPA's approval of State Implementation Plan revision addressing the 2010 1-Hour SO₂ NAAQS nonattainment in the Indiana Nonattainment Area ("Indiana Nonattainment Area SIP"), Genon NE shall submit an application to amend its operating permit to include provisions of this Order that pertain to the Conemaugh Plant.

3. Transfer of Site. If Genon NE intends to transfer any legal or equitable interest in the Conemaugh Plant, Genon NE shall serve a copy of this Order upon the prospective transferee of the legal and equitable interest at least 30 days prior to the contemplated transfer and shall simultaneously inform the Southwest Regional Office of the Department of such intent.

4. Correspondence with Department. All correspondence with the Department concerning this Order shall be addressed to:

Mark Gorog, PE Regional Air Quality Program Manager Pennsylvania Department of Environmental Protection 400 Waterfront Drive Pittsburgh, PA 15222-4745 Phone: (412) 442-4000 Fax: (412) 442-4194

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay

Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD (717-787-3483) FOR MORE INFORMATION.

> FOR THE COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF ENVIRONMENTAL PROTECTION:

Mark R Gorog, P.E. Air Quality Program Manager Southwest Regional Office