

**BEFORE THE ADMINISTRATOR  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

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In the Matter of: )

**Portland Generating Station** )  
Upper Mount Bethel Township )  
Northampton County, PA )  
Permit No. 48-00006 )  
Facility No. 52-2154847-6 )

Issued by the Pennsylvania )  
Department of Environmental Protection )  
\_\_\_\_\_ )

Order Responding to

Petitioner's Request that  
the Administrator Object  
to Issuance of a State  
Operating Permit

**ORDER DENYING**  
**PETITION FOR OBJECTION TO PERMIT**

On July 26, 2006, the United States Environmental Protection Agency ("EPA") received a petition from the New Jersey Department of Environmental Protection ("NJDEP" or the "Petitioner"), dated July 21, 2006, asking the Administrator to object to a permit proposed to be issued by the Pennsylvania Department of Environmental Protection ("PADEP") to the Portland Generating Station in Northampton County, Pennsylvania. The permit proposed by PADEP is a state-issued operating permit issued pursuant to title V of the Clean Air Act ("CAA" or the "Act"), 42 U.S.C. §§ 7661-7661f. Reliant Energy Mid-Atlantic Power Holdings, LLC is the current holder of permits issued to the plant, and the proposed recipient of the title V permit at issue. The Portland Generating Station is located adjacent to the Delaware River, which defines the border between New Jersey and Pennsylvania.

NJDEP raised the following issues in its petition. First, it alleges that the Portland plant was modified in violation of the Prevention of Significant Deterioration ("PSD") provisions of the CAA, and has failed to install Best Available Control Technology ("BACT") on its boilers. Second, NJDEP alleges that modifications also increased the hourly emission rate at the plant and therefore, triggered certain New Source Performance Standards ("NSPS"). Third, NJDEP alleges that the title V permit must contain maximum heat input limits for each boiler to prevent the boilers from exceeding the National Ambient Air Quality Standards ("NAAQS") for NOx and PM, to avoid triggering the NSPS, and to assure compliance with the Pennsylvania State Implementation Plan ("SIP").

EPA has reviewed these allegations pursuant to the standard set forth in section 505(b)(2) of the Act, which requires the Administrator to issue an objection if the Petitioner demonstrates to the Administrator that the permit is not in compliance with the applicable requirements of the Act. See also 40 C.F.R. § 70.8(d); New York Public Interest Group v. Whitman, 321 F.3d 316, 333 n.11 (2d Cir. 2002)

Based on a review of the information before me, including, but not limited to, the petition, the proposed title V permit (marked "final draft") sent to EPA via e-mail on May 24, 2006, and relevant statutory and regulatory authorities, I deny the petition for the reasons set forth in this Order.

## **I. STATUTORY AND REGULATORY FRAMEWORK**

Section 502(d)(1) of the Act, 42 U.S.C. § 7661a(d)(1), calls upon each state to develop and submit to EPA an operating permit program intended to meet the requirements of CAA title V. The Pennsylvania title V permit program received full approval from EPA on July 30, 1996. See 61 Fed. Reg. 39597 (July 30, 1996); 40 C.F.R. Part 70, Appendix A. Pennsylvania's title V program regulations are found at 25 Pa. Code, chapter 127, subchapter G, entitled "Title V Operating Permits." All major stationary sources of air pollution and certain other sources are required to apply for title V operating permits that include emission limitations and other conditions as necessary to assure compliance with applicable requirements of the Act, including the applicable implementation plan. See CAA sections 502(a) and 504(a), 42 U.S.C. §§ 7661a(a) and 7661c(a).

The title V operating permit program does not generally impose new substantive air quality control requirements (which are referred to as "applicable requirements") but does require permits to contain monitoring, recordkeeping, reporting, and other conditions to assure compliance by sources with existing applicable emission control requirements. See 57 Fed. Reg. 32250, 32251 (July 21, 1992). One purpose of the title V program is to "enable the source, States, EPA, and the public to better understand the requirements to which the source is subject, and whether the source is meeting those requirements." Id. Thus, the title V operating permit program is a vehicle for ensuring that existing air quality control requirements are appropriately applied to facility emission units in a single document and that compliance with these requirements is assured.

Under section 505(a) of the Act, 42 U.S.C. § 7661d(a), and 40 C.F.R. § 70.8(a), states are required to submit each proposed title V permit to EPA for review. Upon receipt of a proposed permit, EPA has 45 days to object to final issuance of the permit if it is determined not to be in compliance with applicable requirements or the requirements of title V. 40 C.F.R. § 70.8(c). If EPA does not object to a permit on its own initiative, section 505(b)(2) of the CAA, 42 U.S.C. § 7661d(b)(2), and 40 C.F.R. § 70.8(d) provide that any person may petition the Administrator, within 60 days of the expiration of EPA's 45-day review period, to object to the permit.

Section 505(b)(2) of the Act, 42 U.S.C. § 7661d(a), requires the Administrator to issue a permit objection if a petitioner demonstrates that a permit is not in compliance with the requirements of the Act, including the requirements of 40 C.F.R. Part 70 and the applicable implementation plan. Petitions must be based on objections to the permit raised with reasonable specificity during the public comment period (unless the petitioner demonstrates that it was impracticable to raise such objections within that period or the grounds for objection arose after that period). 40 C.F.R. § 70.8(c)(1). If the permitting authority has not yet issued the permit, it may not do so unless it revises the permit and issues it in accordance with section 505(c) of the Act, 42 U.S.C. § 7661d(c). However, a petition for review does not stay the effectiveness of the permit or its requirements if the permitting authority issued the permit after the expiration of EPA's 45-day review period and before receipt of the objection. If, in responding to a petition, EPA objects to a permit that has already been issued, EPA or the permitting authority will modify, terminate, or revoke and reissue the permit.

## **II. BACKGROUND**

The emission producing units at the Portland Generating Station include two coal-fired boilers (Unit 1 and Unit 2), three gas/oil-fired simple cycle combustion turbines (Unit 3, Unit 4 and Unit 5), an auxiliary oil-fired boiler, emergency diesel generators, miscellaneous small oil-fired units, coal storage and handling facilities, and various liquid fuel storage tanks. The largest units are Units 1, 2 and 5. Unit 1 is a pulverized coal-fired Combustion Engineering once through "mono tube" subcritical tangentially fired boiler rated at 172 MW gross (158 MWe net). It was installed in 1958. Emissions are controlled by Low-NOx burners, a separated over fire air system, and an electrostatic precipitator. Unit 2 is also a pulverized coal-fired Combustion Engineering controlled circulation, divided furnace, subcritical tangentially fired boiler, rated at 253 MW gross (243 MWe net). It was installed in 1962. Emissions are controlled by Low-NOx burners, a separated over fire air system, and an electrostatic precipitator. Units 3 and 4 are simple cycle combustion turbines fueled by both natural gas and No. 2 oil. Unit 3 is rated at 17 MWe and was placed in service in 1967, while Unit 4 is rated at 22 MWe and was placed in service in 1971. Unit 5 is a Siemens V 84.3, 150 MW simple cycle combustion turbine fueled by both natural gas and No. 2 oil with maximum sulfur content not to exceed 0.05% by weight. The unit was placed in service in October 1994, and emissions are controlled by dry Low-NOx burners with water injection.

## **III. THRESHOLD REQUIREMENTS**

### **A. Timeliness of Petition**

Section 505(b)(2) of the Act provides that a person may petition the Administrator of EPA, within 60 days after the expiration of EPA's forty-five day review period, to object to the issuance of a proposed permit.

PADEP released its draft title V permit on June 8, 2005 for public comment. NJDEP submitted its comments by letter dated July 8, 2005. EPA Region III e-mailed comments on the June 8th draft permit to PADEP on June 24, 2005. After the public comment period ended and after EPA's initial comments, PADEP submitted two revised title V permits to EPA in response to EPA's comments. On December 2, 2006, PADEP provided its response to the comments of NJDEP (as an "affected state") pursuant to 25 Pa. Code § 127.522(e) and 40 C.F.R. § 70.8(b)(2) to EPA and NJDEP, and indicated that it was refusing to accept any of the comments provided in NJDEP's July 8, 2005 letter. PADEP submitted what it labeled as a "final draft" of the Reliant Portland title V permit to EPA via e-mail on May 24, 2006. The May 24, 2006 permit contains material substantive changes from the proposed permit EPA received on June 9, 2005. EPA has not had further comments on this latest "final draft."<sup>1</sup> For these reasons, EPA considers this May 24, 2006 "final draft" permit to be the "proposed" permit in this matter. Accordingly, the deadline for NJDEP's petition under CAA section 505(b)(2) was 105 days from May 24, 2006. As noted above, NJDEP's petition to object was received by the Administrator on July 26, 2006. Accordingly, for purposes of this matter, EPA considers the petition to have been filed timely.

#### B. Objections Raised with Reasonable Specificity During Public Comment Period

Section 505(b)(2) of the Act provides that a petition shall be based on objections raised with reasonable specificity during the public comment period provided by the permitting agency. Permitting agencies are not required to infer every possible basis for a commenter's allegation and then refute each one. See Mossville Envtl. Action Now v. EPA, 370 F.3d 1232, 1238-40 (D.C. Cir. 2004) (requiring Agency to answer all possible implied arguments in challenges it receives does not meet the standard of "reasonable specificity"; "reasonable specificity requires something more than a 'general [challenge] to EPA's approach'").

Here, the issues raised in NJDEP's petition to object were first raised in its July 8, 2005 public comments. With one exception noted in Section IV.C below, the NJDEP raised its concerns with reasonable specificity and the issues will be further considered in this Order.

### IV. ISSUES RAISED BY THE PETITIONER

#### A. Title V Permit Fails to Include a Compliance Schedule to Remedy Prevention of Significant Deterioration ("PSD") Violations at Units 1 and 2

NJDEP's petition states "[d]ata relating to the Portland plant indicates that Units 1-2 (both coal-fired units) increased their heat input capacity due to physical changes that resulted in a significant increase in emissions of sulfur dioxide ("SO<sub>2</sub>"), NO<sub>x</sub> and PM." Petition, p. 3. The petition notes that the heat input for Unit 1 has changed from a "rated capacity" in 1973 of 1,480 MMBtu/hour to an "actual heat input (24-hour period)" in 1991 of 1,657 MMBtu/hour to a "rated capacity" in the 2001 title V permit of 1,657.2 MMBtu/hour. Id. For Unit 2, the petition notes that heat input changed from a "rated capacity" of 2,185 MMBtu/hour in 1971 to an "actual heat

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<sup>1</sup> PADEP has not yet issued the final title V permit for the Reliant Portland facility.

input (24-hour period”) of 2,511 MMBtu/hour in 1991 to a “rated capacity” in the 2001 title V permit of 2,511.6 MMBtu/hour. Id. The petition asserts that the 11% and 13% increase in heat input at Units 1 and 2, respectively, “indicates that the physical capability of the units increased, thereby increasing the hourly emission rate as well as overall annual emissions of SO<sub>2</sub>, NO<sub>x</sub>, and PM.” Id., at 4. The petition then cites acid rain data showing that SO<sub>2</sub> emissions for Unit 1 increased by 70% from 1985 to 1995 as further proof of changes at Unit 1. Finally, the petition asserts, with no further detail, that “[i]nformation submitted to EPA pursuant to EPA’s Section 114 request . . . with respect to the Portland plant confirms that various capital projects were undertaken at the plant during the 1980s and early 1990s.” Id. As stated in the petition, “NJDEP contends that these physical changes increased the heat capacity of Units 1 - 2 and resulted in a significant increase in emissions of SO<sub>2</sub>, NO<sub>x</sub>, and PM.” Id.

EPA’s review of the comments NJDEP filed with PADEP in July 2005 show that the same allegations raised in the paragraph above are raised in NJDEP’s comments, although with differing numbers.<sup>2</sup> There is some additional information contained in the comments, which are attached to NJDEP’s petition, but the comments provide very little additional pertinent information regarding the PSD or NSPS violations. As discussed below, EPA believes that the petition and comments do not provide the requisite degree of information necessary “to demonstrate to the Administrator that the permit is not in compliance with the requirements of this Act ....” See CAA § 505(b)(2).

### Discussion

The petitioner filed its petition pursuant to § 505(b)(2) of the Act, which states that “the Administrator shall issue an objection within such period if the petitioner demonstrates to the Administrator that the permit is not in compliance with the requirements of this chapter, including the requirements of the applicable state implementation plan.” What constitutes a sufficient “demonstration” by a petitioner is not defined by the Act. However, in another order responding to a title V petition alleging NSR/PSD violations, In the Matter of Georgia Power Company, Bowen Steam-Electric Generating Plant, (Jan. 8, 2007), EPA set forth some factors which may be relevant in determining whether the information presented by Petitioner is sufficient to “demonstrate” NSR/PSD applicability, under CAA section 505(b)(2). EPA may consider as relevant to that demonstration the filing of a notice of violation or complaint by EPA or the permitting agency, the quality of the information presented by the petitioner, whether the underlying facts are disputable, the types of defenses available to the source, and the nature of any disputed legal questions. See In the Matter of Georgia Power Company, at 7.

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<sup>2</sup> NJDEP’s public comments claim the same starting (1480 MMBtu/hr) and current (1657.2 MMBtu/hr) heat input rates for Unit 1 as the petition, but quite different heat input rates in the period between those dates. For Unit 2, the 1973 heat input rate in NJDEP’s public comments is different than the 1973 heat input claimed in the petition, as are all the other heat inputs given for Unit 2, except for the current heat input.

In NSR/PSD enforcement actions, defendants typically dispute both issues of law and fact, including, *inter alia*, the determination of the baseline period for determining pre-change emission levels, whether certain modifications were the “cause” of emission increases seen after the change, the proper methodology for calculating annual emissions, and whether certain contemporary decreases in emissions are creditable for the purpose of doing a “net emissions increase” analysis. In addition, the PSD/NSR regulations themselves create a number of possible exemptions to the regulatory requirements, including the “routine maintenance, repair or replacement” exemption for certain physical changes, and the “demand growth” exclusion. See 40 C.F.R. § 52.21(b) (2)(iii)(a) and (f).

NJDEP, in support of its petition, does not provide sufficient information to establish Reliant’s NSR liability.<sup>3</sup> For example, the “physical changes” alleged to have led to the heat input increases at Units 1 and 2 are not identified in the petition or the comments. Rather, NJDEP simply makes conclusory references to the fact that Reliant made “modifications” and “physical changes” that led to heat input increases. Petition, p. 3. While NJDEP may have undertaken “a thorough investigation of the Portland plant and reviewed numerous documents provided to EPA as part of EPA’s investigation of the plant” (Petition, p. 5), it has not presented evidence from that review to establish the existence of specific modifications undertaken at the plant, or associated emissions increases, that would demonstrate applicability of NSR/PSD.

Petitioner has not established that the NSR/PSD requirements are applicable to the Reliant plant. Accordingly, I conclude that the Petitioner has not made the requisite demonstration, under CAA section 505(b)(2), and the petition is denied on this issue.<sup>4</sup>

#### B. Modifications at the Reliant Plant Caused an Increase in the Hourly Emissions Rate at Both Units 1 and 2, Triggering NSPS Requirements.

The New Source Performance Standards (“NSPS”) apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is

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<sup>3</sup> EPA notes that the New Jersey Attorney General’s Office has filed a document entitled “Notice of Intent to Sue Pursuant to Clean Air Act § 7604,” dated November 16, 2005. This document is referred to in the Petition as a “Notice of Violation,” although NJDEP is not the permitting authority for Portland Generating Station. Petition, p. 5. The Petition states that “noncompliance for purposes of the Title V permit review process is demonstrated by the NOV issued by NJDEP, which delineates NJDEP’s determination that the Portland plant is operating in violation of PSD and/or NSPS and SIP requirements.” Petition, p. 5. However, this Notice of Intent to Sue only alleges PSD violations, and provides less factual support for the allegation than the Petition.

<sup>4</sup> Note, however, that while the proposed permit does not contain NSR/PSD or NSPS as applicable requirements, it also does not provide any safe harbor from enforcement of NSR/PSD or NSPS requirements should those be found to apply. Thus, the permit does not preclude any ongoing or future enforcement action against Reliant Energy.

commenced after the date of publication in Part 60 of any standard applicable to that facility. 40 C.F.R. § 60.1(a). NJDEP fails to reference the NSPS subpart that it contends was violated. Rather than summarily deny the petition on this issue for lack of specificity, EPA will assume that NJDEP meant to specifically reference 40 C.F.R. Part 60, subpart Da, the “Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978.” The referenced NSPS applies to each electric utility steam generating unit capable of combusting greater than 73 megawatts heat input of fossil fuel for which construction or modification is commenced after September 18, 1978. 40 C.F.R. § 60.40a(a). The general NSPS regulations, which are applicable to all the NSPS unless otherwise noted, define a “modification” as “any physical or operational change . . . which results in an increase in the emission rate to the atmosphere of any pollutant.” 40 C.F.R. § 60.14(a). The “emission rate” is defined as the maximum hourly emissions from the relevant piece of equipment operating at its maximum achievable capacity. 40 C.F.R. § 60.14(b); § 60.14(h) (1993). The NSPS emissions test therefore determines whether an “increase in the emission rate” has occurred by comparing maximum hourly emissions at maximum capacity both before and after the change. Because it considers only maximum hourly rates, the NSPS test is not triggered by changes that increase emissions due only to increased hours of operation.

NJDEP offers even less information to support its claim that this NSPS is an applicable requirement than it offers in connection with its claim that NSR is an applicable requirement. NJDEP simply states in the petition that: “NJDEP also contends that modifications undertaken at the plant likely resulted in an increase in the hourly emission rate at both Units 1-2, which would trigger NSPS requirements.” Petition, p. 3. As noted above, conclusory statements alone are insufficient to establish the applicability of NSPS to Reliant’s emission units. The petition includes no information to establish that modification(s) and the associated increase in the hourly emission rate triggered an applicable NSPS. As noted above, NJDEP fails to even identify the specific modifications that allegedly triggered the NSPS (or to identify the specific NSPS). NJDEP has provided insufficient information to demonstrate that NSPS is an applicable requirement for the Portland Generating Station. Accordingly, I am denying the petition on this issue.

#### C. The Proposed Permit Lacks Any Limits on Maximum Allowable Heat Input Capacities for Units 1 and 2.

NJDEP alleges in its petition that the title V permit is inadequate because it fails to include allowable heat input limits for Units 1 and 2 to ensure that emissions from the units: 1) do not exceed the NAAQS for NO<sub>x</sub> and PM, 2) do not trigger NSPS requirements, and 3) comply with the Pennsylvania SIP. Petition, p. 6. For the reasons identified below, I am denying the petition on this issue.

First, NJDEP’s comments on the draft Reliant Portland title V permit make no mention of the possibility that lack of heat input limits would lead to NAAQS exceedances for any pollutant. Moreover, NJDEP offers no explanation in its petition for why it was impracticable to raise the

issue during the public comment period for the draft permit. Accordingly, having failed to give the permitting authority a meaningful opportunity to address this issue, the issue will not be considered here. See CAA section 502(b); 40 C.F.R. § 70.8(d).

Second, as discussed above in Sections A and B, NJDEP presented insufficient evidence to establish that NSPS is an applicable requirement. Title V permits must contain monitoring sufficient to assure compliance with existing applicable requirements, but need not contain monitoring sufficient to indicate when a facility might become subject to a new applicable requirement.<sup>5</sup> Should these units be found to be subject to the NSPS (or other applicable requirements) in the future, then the permitting authority would be required to include appropriate applicable requirements, including monitoring, in the permit.

Third, review of the emission standards and limitations currently contained in the permit for Units 1 and 2, which are derived from the current federally-approved Pennsylvania SIP, show that there is no need for additional heat input or operational limits in the title V permit to assure compliance with these emission standards and limitations.<sup>6</sup> The monitoring and testing requirements in the proposed permit, along with prior emission tests, provide sufficient information to assure compliance with the limits. With respect to the NO<sub>x</sub> and SO<sub>2</sub> limits in the proposed permit, the Portland plant can demonstrate compliance with emission limits using the continuous emissions monitors (CEMS) which are required under the permit. For PM, the proposed permit requires the Portland plant to continuously calculate the particulate matter emission concentration using data from a continuous opacity monitoring system (COMS), based on a site-specific correlation for opacity and PM, and continuous exhaust flow and carbon dioxide concentration data.

Because the CEMS and COMs (and the site-specific correlation for PM) provide real-time data regarding the emission rates, there is no need for a restriction on heat input to ensure that the units meet their emission limits on an on-going basis. Therefore, the proposed permit provides sufficient monitoring to ensure compliance with the SO<sub>2</sub>, NO<sub>x</sub>, and PM emission limits established in the Pennsylvania SIP for the Portland plant.

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<sup>5</sup> EPA also notes that the permit contains provisions, including continuous monitoring requirements for NO<sub>x</sub>, SO<sub>2</sub> and opacity, which will provide the data necessary to determine if an increase in the emission rate of a measured pollutant occurs following a “modification” at the Reliant plant.

<sup>6</sup> The Petition lists the following limits for units 1 and 2 in the title V permit:

PM no greater than 0.1 lbs/MMBtu heat input;

SO<sub>2</sub> no greater than 4.0 lbs/MMBtu heat input at any time and 3.7 lbs/MMBtu on a 30-day running average, and no greater than 8.73 tons and 13.35 tons per 3-hour period for Units 1 and 2, respectively;

NO<sub>x</sub> no greater than 0.370 lbs/MMBtu and 0.580 lbs/MMBtu on a 30-day running average for Units 1 and 2, respectively, and no greater than 379.4 tons per month for Unit 2.

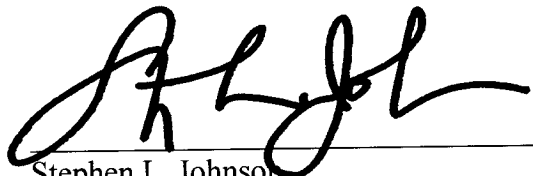


Accordingly, for the reasons above, I am denying the request for an objection based on the lack of enforceable heat input limitations.

### CONCLUSION

For the reasons set forth above, and pursuant to Section 505(b)(2) of the Clean Air Act, I hereby deny the petition from the New Jersey Department of Environmental Protection requesting objection to the issuance of a title V permit for the Reliant Portland Steam Electric Generating Station.

Dated: JUN 20 2007

  
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Stephen L. Johnson  
Administrator