6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

[EPA-HQ-OAR-2016-0347; FRL-_____]

RIN 2060-AT35

Response to June 1, 2016 Clean Air Act Section 126(b) Petition from Connecticut

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of Proposed Action on Petition.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to deny a section 126(b) petition submitted by the state of Connecticut pursuant to the Clean Air Act (CAA or Act) on June 1, 2016. The petition requested that EPA make a finding that emissions from Brunner Island Steam Electric Station (Brunner Island), located in York County, Pennsylvania, are significantly contributing to nonattainment and interfering with maintenance of the 2008 ozone national ambient air quality standards (NAAQS) in Connecticut in violation of the good neighbor provision under the CAA. The EPA proposes to deny the petition because Connecticut has not met its burden to demonstrate that the source emits or would emit in violation of the good neighbor provision such that it will significantly contribute to nonattainment or interfere with maintenance of the 2008 ozone NAAQS in Connecticut. The EPA is further proposing to deny the petition based on the conclusion that the Brunner Island facility does not currently emit nor is it expected to emit pollution in violation of the good neighbor provision for the 2008 ozone NAAQS.

DATES: *Comments.* Comments must be received on or before March 26, 2018. *Public Hearing.* The EPA is holding a public hearing on the EPA's response to the June 1, 2016, CAA section 126(b) petition from Connecticut on Friday, February 23, 2018. Additional information for this public hearing is available in a separate Federal Register notice published on February 14, 2018 (83 FR 6490). **ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2016-0347, at *http://www.regulations.gov*. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the Web, Cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit *http://www2.epa.gov/dockets/commenting-epa-dockets*.

FOR FURTHER INFORMATION CONTACT: Questions concerning this proposed notice should be directed to Mr. Lev Gabrilovich, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Air Quality Policy Division, Mail Code C539-01, Research Triangle Park, NC 27711, telephone (919) 541-1496; email at *gabrilovich.lev@epa.gov*.

SUPPLEMENTARY INFORMATION:

The information in this document is organized as follows:

I. General Information

Throughout this document wherever "we," "us," or "our" is used, we mean the U.S. EPA.

Where can I get a copy of this document and other related information?

The EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2016-0347 (available at *http://www.regulations.gov*). The EPA has made available information related to the proposed action and the public hearing at Web site: *https://www.epa.gov/ozone-pollution/connecticut-126-petition*.

II. Background and Legal Authority

A. Ozone and Public Health

Ground-level ozone is not emitted directly into the air, but is a secondary air pollutant created by chemical reactions between oxides of nitrogen (NO_X) and volatile organic compounds (VOCs) in the presence of sunlight. For a discussion of ozone-formation chemistry, interstate transport issues, and health effects, *see* the Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS. 81 FR 74504, 74513-4.

B. Clean Air Act Sections 110 and 126

The statutory authority for this action is provided by the CAA sections 126 and 110(a)(2)(D)(i). Section 126(b) of the CAA provides, among other things, that any state or political subdivision may petition the Administrator of the EPA to find that any major source or group of stationary sources in an upwind state emits or would emit any air pollutant in violation of the prohibition of CAA section 110(a)(2)(D)(i),[1] which we describe later in detail. Findings by the Administrator, pursuant to this section, that a source or group of sources emits air pollutants in violation of the CAA section 110(a)(2)(D)(i) prohibition are commonly referred to as section CAA 126(b) findings. Similarly, petitions submitted pursuant to this section are commonly referred to as CAA section 126(b) petitions.

CAA section 126(c) explains the impact of a CAA section 126(b) finding and establishes the conditions under which continued operation of a source subject to such a finding may be permitted. Specifically, CAA section 126(c) provides that it would be a violation of section 126 of the Act and of the applicable state implementation plan (SIP): (1) for any major proposed new or modified source subject to a CAA section 126(b) finding to be constructed or operate in violation of the prohibition of CAA section 110(a)(2)(D)(i); or (2) for any major existing source for which such a finding has been made to operate more than three months after the date of the finding. The statute, however, also gives the Administrator discretion to permit the continued operation of a source beyond 3 months if the source complies with emission limitations and compliance schedules provided by the EPA to bring about compliance with the requirements

[1] The text of CAA section 126 codified in the U.S. Code cross-references section 110(a)(2)(D)(ii) instead of section 110(a)(2)(D)(i). The courts have confirmed that this is a scrivener's error and the correct cross-reference is to CAA section 110(a)(2)(D)(i), *See Appalachian Power Co. v. EPA*, 249 F.3d 1032, 1040–44 (D.C. Cir. 2001).

contained in CAA sections 110(a)(2)(D)(i) and 126 as expeditiously as practicable but no later than 3 years from the date of the finding. *Id.*

Section 126(b) of the CAA provides a mechanism for states and other political subdivisions to seek abatement of pollution in other states that may be affecting their air quality; however, it does not identify specific criteria or a specific methodology for the Administrator to apply when deciding whether to make a section 126(b) finding or deny a petition. Therefore, the EPA has discretion to identify relevant criteria and develop a reasonable methodology for determining whether a section 126(b) finding should be made. *See, e.g.*, *Chevron, U.S.A., Inc. v. NRDC*, 467 U.S. 837, 842–43 (1984); *Smiley v. Citibank*, 517 U.S. 735, 744–45 (1996). As an initial matter, the EPA's historic approach to evaluating CAA section 126(b) petitions looks first to see whether a petition identifies or establishes a technical basis for the requested section 126(b) finding. The EPA first evaluates the technical analysis in the petition to see if that analysis, standing alone, is sufficient to support a section 126(b) finding. The EPA focuses on the analysis in the petition because the statute does not require the EPA to conduct an independent technical analysis to evaluate claims made in section 126(b) petitions. The petitioner thus bears the burden of establishing, as an initial matter, a technical basis for the specific finding requested. The EPA has no obligation to prepare an analysis to supplement a petition that fails, on its face, to include an initial technical demonstration. Such a petition, or a petition that fails to identify the specific finding requested, could be found insufficient.

Nonetheless, the EPA may decide to conduct independent analyses when helpful in evaluating the basis for a potential section 126(b) finding or developing a remedy if a finding is made. As explained later, given the EPA's concerns with the technical information submitted as part of Connecticut's CAA section 126(b) petition, and the fact that the EPA has previously

issued a rulemaking defining and at least partially addressing the same environmental concern that the petition seeks to address, the EPA determined that it was appropriate to conduct independent analysis to determine whether it should grant or deny the petition. Such analysis, however, is not required by the statute and may not be necessary or appropriate in other circumstances.

Section 110(a)(2)(D)(i) of the CAA, often referred to as the "good neighbor" or "interstate transport" provision of the Act, requires states to prohibit certain emissions from in-state sources if such emissions impact the air quality in downwind states. Specifically, CAA sections 110(a)(1) and 110(a)(2)(D)(i)(I) requires all states, within 3 years of promulgation of a new or revised NAAQS, to submit SIPs that contain adequate provisions prohibiting any source or other type of emissions activity within the state from emitting any air pollutant in amounts which will contribute significantly to nonattainment in, or interfere with maintenance by, any other state with respect to any such national primary or secondary ambient air quality standard. As described further in section II.C, the EPA has developed a number of regional rulemakings to address CAA section 110(a)(2)(D)(i)(I) for the ozone NAAQS. The EPA's most recent rulemaking, the Cross-State Air Pollution Rule Update (CSAPR Update), was promulgated to address interstate transport under section 110(a)(2)(D)(i)(I) for the 2008 ozone NAAQS. 81 FR 74504 (October 26, 2016).

Considering both section 110(a)(2)(D)(i) and section 126, the EPA has consistently acknowledged that Congress created these provisions as two independent statutory tools to address the problem of interstate pollution transport. *See, e.g.*, 76 FR 69052, 69054 (November

7, 2011).[2] Congress provided both provisions without indicating any preference for one over the other, suggesting it viewed either approach as a legitimate means to produce the desired result. While the two provisions unquestionably may be applied independently, they are also closely linked in that a violation of the prohibition in CAA section 110(a)(2)(D)(i) is a condition precedent for action under CAA section 126(b) and, critically, that significant contribution and interference with maintenance are construed identically for purposes of both provisions (since the identical terms are naturally interpreted as meaning the same thing in the two linked provisions). *See Appalachian Power Co. v EPA*, 249 F. 3d at 1049–50. Thus, in interpreting the phrase "emits or would emit in violation of the prohibition of section [110(a)(2)(D)(i)]," if the EPA or a state has adopted provisions that eliminate the significant contribution to nonattainment or interference with maintenance in downwind states, then there simply is no violation of the CAA section 110(a)(2)(D)(i)(I) prohibition. Put another way, requiring additional reductions would result in eliminating emissions that do not contribute significantly to nonattainment or interfere with maintenance of the NAAQS, an action beyond the scope of the prohibition in CAA section 110(a)(2)(D)(i)(I) and therefore beyond the scope of EPA's authority to make the requested finding under CAA section 126(b). *See EPA v. EME Homer City Generation, L.P.*, 134 S. Ct. 1584, 1604 n.18, 1608-09 (2014) (holding the EPA may not require sources in upwind states to reduce emissions by more than necessary to eliminate significant contribution to nonattainment or interference with maintenance of the NAAQS in downwind states under the good neighbor provision).

[2] Courts have also upheld the EPA's position that CAA sections 110(a)(2)(D)(i) and section 126 are two independent statutory tools to address the same problem of interstate transport. *See GenOn REMA, LLC v. EPA*, 722 F.3d 513, 520-23 (3d Cir. 2013); *Appalachian Power Co. v. EPA*, 249 F.3d at 1047.

Thus, it follows that if a state already has a SIP that the EPA approved as adequate to meet the requirements of CAA section 110(a)(2)(D)(i)(I), the EPA would not find that a source in that state was emitting in violation of the prohibition of CAA section 110(a)(2)(D)(i)(I) absent new information demonstrating that the SIP is now insufficient to address the prohibition. Similarly, if a state had failed to adopt an approvable SIP meeting the requirements of CAA section 110(a)(2)(D)(i)(I) and the EPA consequently promulgated a federal implementation plan (FIP) that fully addressed the deficiency, the FIP would eliminate emissions that significantly contribute to nonattainment or interfere with maintenance in a downwind state, and, hence, absent new information to the contrary, sources in the upwind state would not emit in violation of the section 110(a)(2)(D)(i)(I) prohibition.[3]

C. The EPA's Historical Approach to Addressing Interstate Transport of Ozone under the Good Neighbor Provision

Given that ozone formation, atmospheric residence, and transport occur on a regional scale (i.e., hundreds of miles) over much of the eastern U.S., the EPA has historically addressed interstate transport of ozone pursuant to the good neighbor provision through a series of regional rulemakings focused on the reduction of NO_X emissions, routinely finding that downwind states' problems attaining and maintaining the ozone NAAQS result in part from the contribution of

[3] Note however, a SIP or FIP implementing section 110(a)(2)(D)(i)(I) only means that a state's emissions are adequately prohibited for the particular set of facts analyzed under approval of a SIP or promulgation of a FIP. For example, if a petitioner produces new data or information showing a different level of contribution or other facts not considered when the SIP or FIP was promulgated, compliance with a SIP or FIP may not be determinative regarding whether the upwind sources would emit in violation of the prohibition of section 110(a)(2)(D)(i)(I). *See* 64 FR 28250, 28274 n.15 (May 25, 1999); 71 FR 25328, 25336 n.6 (April 28, 2006); *Appalachian Power*, 249 F.3d at 1067 (later developments can be the basis for another CAA section 126 petition).

pollution from multiple upwind sources located in different upwind states. For example, the EPA noted in the NO_X SIP Call that "[t]he fact that virtually every nonattainment problem is caused by numerous sources over a wide geographic area is a factor suggesting that the solution to the problem is the implementation over a wide area of controls on many sources, each of which may have a small or unmeasurable ambient impact by itself." 63 FR 57356, 57377 (October 27, 1998).

The EPA has promulgated four regional interstate transport rulemakings that have addressed the good neighbor provision with respect to various ozone NAAQS. The EPA's first such rulemaking, the NO_X SIP Call, addressed interstate transport with respect to the 1979 ozone NAAQS and was finalized on October 27, 1998. 63 FR 57356. The NO_X SIP Call promulgated statewide emission budgets and required upwind states to adopt SIPs which would decrease NO_X emissions by amounts that would significantly contribute to nonattainment of the ozone NAAQS in downwind states. The EPA also promulgated a model rule for a regional allowance trading program called the NO_X Budget Trading Program that states could adopt in their SIPs as a mechanism to achieve some or all of the required emission reductions. Id. All of the jurisdictions covered by the NO_X SIP Call ultimately chose to adopt the NO_X Budget Trading Program into their SIPs.[4]

In coordination with the NO_X SIP Call rulemaking under CAA section 110(a)(2)(D)(i)(I), the EPA also addressed several pending CAA section 126(b) petitions submitted by eight northeastern states regarding the same air quality issues (i.e., interstate ozone transport for the

[4] The NO_X Budget Trading Program operated from 2003 through 2008. Beginning in 2009, it was effectively replaced by the ozone season NO_X Budget Trading program under the Clean Air Interstate Rule (CAIR).

1979 ozone NAAQS) addressed by the NO_X SIP Call. These CAA section 126(b) petitions asked the EPA to find that ozone emissions from numerous sources located in 22 states, and the District of Columbia, had adverse air quality impacts on the petitioning downwind states. Based on technical determinations made in the NO_X SIP Call regarding upwind state impacts on downwind air quality, the EPA in May 1999 made technical determinations regarding the claims in the petitions, but did not at that time make the CAA section 126(b) findings requested by the petitions. 64 FR 28250. In making these technical determinations, the EPA concluded that the NO_X SIP Call would itself fully address and remediate the claims raised in these petitions, and that the EPA would therefore not need to take separate action to remedy any potential violations of the CAA section 110(a)(2)(D)(i) prohibition. 64 FR 28252 (May 25, 1999). However, more than 2 years after the petitions were submitted, subsequent litigation over the NO_X SIP Call led the EPA to "de-link" the CAA section 126(b) petition response from the NO_X SIP Call, and the EPA made final CAA section 126(b) findings for 12 states and the District of Columbia, finding sources in the states emitted in violation of the prohibition in the good neighbor provision with respect to the 1979 ozone NAAQS based on the affirmative technical determinations made in the May 1999 rulemaking. In order to remedy the violation under CAA section 126(c), the EPA promulgated requirements for affected sources in the upwind states to participate in a regional allowance trading program whose requirements were designed to be interchangeable with the requirements of the optional NO_X Budget Trading Program model rule provided under the NO_X SIP Call. 65 FR 2674 (January 18, 2000).

The EPA next promulgated the Clean Air Interstate Rule (CAIR) to address interstate transport under the good neighbor provision with respect to the 1997 ozone NAAQS, as well as the 1997 $PM_{2.5}$ NAAQS. The EPA adopted the same framework to quantifying the level of

states' significant contribution to downwind nonattainment in CAIR as it used in the NO_X SIP Call, based on the determination in the NO_X SIP Call that downwind ozone nonattainment is due to the impact of emissions from numerous upwind sources and states. 70 FR 25162, 25172 (May 12, 2005). Regarding the contribution to downwind pollution from upwind states, the EPA explained that "[t]ypically, two or more States contribute transported pollution to a single downwind area, so that the 'collective contribution' is much larger than the contribution of any single State." Id. at 25186. CAIR included two distinct regulatory processes – a regulation to define significant contribution (i.e., the emission reduction obligation) under the good neighbor provision and provide for submission of SIPs eliminating that contribution, 70 FR 25162 (May 12, 2005), and a regulation to promulgate, where necessary, FIPs imposing emission limitations, 71 FR 25328 (April 28, 2006). The FIPs required electric generating units (EGUs) in affected states to participate in regional allowance trading programs, which replaced the previous NO_X Budget Trading Program.

In conjunction with the second CAIR regulation promulgating FIPs, the EPA acted on a CAA section 126(b) petition received from the state of North Carolina on March 19, 2004, seeking a finding that large EGUs located in 13 states were significantly contributing to nonattainment and/or interfering with maintenance of the 1997 ozone and 1997 $PM_{2.5}$ NAAQS in North Carolina. Citing the analyses conducted to support the promulgation of CAIR, the EPA denied the CAA section 126(b) petition in full based on a determination either that the named states were not adversely impacting downwind air quality in violation of the good neighbor provision, or that such impacts were fully remedied by implementation of the emission reductions required by the CAIR FIPs. 71 FR 25328, 25330 (April 28, 2006) (discussing the EPA's basis for denial in part because the EPA promulgated FIPs concurrently with the CAA

section 126(b) response requiring elimination of the interstate transport problems within petitioning states).

CAIR was remanded to the EPA by the D.C. Circuit in July 2008 with the instruction that the EPA replace the rule "from the ground up." *North Carolina v. EPA*, 531 F.3d 896, 929 (D.C. Cir. 2008). Accordingly, the EPA was required to redo its analysis and ensure that implementation of the good neighbor provision would be consistent with the D.C. Circuit's instructions in *North Carolina*.

On August 8, 2011, the EPA promulgated the Cross-State Air Pollution Rule (CSAPR) to replace CAIR. 76 FR 48208 (August 8, 2011). CSAPR addressed the same ozone and $PM_{2.5}$ NAAQS as CAIR and, in addition, addressed interstate transport for the 2006 $PM_{2.5}$ NAAQS by requiring 28 states to reduce SO_2 emissions, annual NO_X emissions, and/or ozone season NO_X emissions that would significantly contribute to other states' nonattainment or interfere with other states' abilities to maintain these air quality standards. Consistent with prior determinations made in the NO_X SIP Call and CAIR, the EPA continued to find that multiple upwind states contributed to downwind ozone nonattainment. Specifically, the EPA found "that the total 'collective contribution' from upwind sources represents a large portion of $PM_{2.5}$ and ozone at downwind locations and that the total amount of transport is composed of the individual contribution from numerous upwind states." Id. at 48237. Accordingly, the EPA conducted a regional analysis, calculated emission budgets for affected states, and required EGUs in these states to participate in new regional allowance trading programs in order to reduce statewide emission levels. CSAPR was subject to nearly 4 years of litigation in which the Supreme Court upheld EPA's approach to calculating emission reduction obligations and apportioning upwind state responsibility under the good neighbor provision, but also held that the EPA was precluded

from requiring more emission reductions than necessary to address downwind air quality problems. *EPA v. EME Homer City Generation, L.P.*, 134 S. Ct. at 1607-1609.

Most recently, the EPA promulgated the CSAPR Update to address the good neighbor provision requirements for the 2008 ozone NAAQS. 81 FR 74504 (October 26, 2016). The final CSAPR Update built upon previous efforts to address the collective contributions of ozone pollution from states in the eastern U.S. to downwind air quality problems, including the NO_X SIP Call, CAIR, and the original CSAPR. The CSAPR Update finalized EGU NO_X ozone season emission budgets for affected states that were developed using uniform control stringency available at a marginal cost of $1,400 per ton of NO_X reduced. This level of control stringency represented the potential for operating and optimizing existing selective catalytic reduction (SCRs) controls; installing state-of-the-art NO_X combustion controls; and shifting generation to existing units with lower NO_X emission rates within the same state.

The CSAPR Update finalized enforceable measures necessary to achieve the emission reductions in each state by requiring power plants in covered states to participate in the CSAPR NO_X Ozone Season Group 2 allowance trading program. The CSAPR Update's trading programs and the EPA's prior emission trading programs (e.g., the NO_X Budget Trading Program associated with the NO_X SIP Call) provide a proven, cost-effective implementation framework for achieving emission reductions. In addition to providing environmental certainty (i.e., a cap on regional and statewide emissions), these programs also provide regulated sources with flexibility when choosing compliance strategies. This implementation approach was shaped by previous rulemakings and reflects the evolution of these programs in response to court decisions and practical experience gained by states, industry, and the EPA.

While some aspects of these rulemakings have been challenged in court—and some aspects of these challenges have been upheld—each of these rulemakings essentially followed the same four-step framework to quantify and implement emission reductions necessary to address the interstate transport requirements of the good neighbor provision. These steps are:

(1) identifying downwind air quality problems relative to the ozone NAAQS. The EPA has identified downwind areas with air quality problems considering monitored ozone data where appropriate and air quality modeling projections to a future compliance year. In CSAPR and the CSAPR Update, the agency identified not only those areas expected to be in nonattainment with the ozone NAAQS, but also those areas that may struggle to maintain the NAAQS, despite clean monitored data or projected attainment;

(2) determining which upwind states are "linked" to these identified downwind air quality problems and warrant further analysis to determine whether their emissions violate the good neighbor provision. In CSAPR and the CSAPR Update, the EPA identified such upwind states as those modeled to contribute at or above a threshold equivalent to one percent of the applicable NAAQS. Upwind states linked to one of these downwind nonattainment or maintenance areas were then evaluated to determine what level of emissions reductions, if any, should be required of each state;

(3) for states linked to downwind air quality problems, identifying upwind emissions on a statewide basis that significantly contribute to nonattainment or interfere with maintenance of a standard. In all four of the EPA's prior rulemakings, the EPA apportioned emission reduction responsibility among multiple upwind states linked to downwind air quality problems using cost-based and air quality-based criteria to quantify the amount of a linked upwind state's emissions that significantly contribute to nonattainment or interfere with maintenance in another state; and

(4) for states that are found to have emissions that significantly contribute to nonattainment or interfere with maintenance of the NAAQS downwind, implementing the necessary emission reductions within the state. The EPA has done this by requiring affected sources in upwind states to participate in allowance trading programs to achieve the necessary emission reductions.

In finalizing the CSAPR Update, the EPA determined the rule may only be a partial resolution of the good neighbor obligation and that the emission reductions required by the rule "may not be all that is needed" to address transported emissions. 81 FR 74521-522 (October 26, 2016). The EPA noted that the information available at that time indicated that downwind air quality problems remained after implementation of the CSAPR Update to which upwind states continued to be linked at or above the one percent threshold. However, the EPA could not determine whether, at step three of the four-step framework, the EPA had quantified all emission reductions that may be considered highly cost effective because the rule did not evaluate non-EGU ozone season NO_X reductions and further EGU control strategies that are achievable on longer timeframes after 2017 (e.g., the implementation of new post-combustion controls).

Of particular relevance to this proposal, the EPA determined in the CSAPR Update that emissions from Pennsylvania were linked to both nonattainment and maintenance concerns for the 2008 ozone NAAQS in Connecticut based on projections to 2017. 81 FR 74538, 74539. The EPA found there were cost-effective emission reductions that could be achieved within Pennsylvania, quantified an emission budget for the state, and required EGUs located within the state, including the source identified in Connecticut's petition, to comply with EPA's trading program under the CSAPR Update. These emission budgets were imposed in order to achieve

necessary emission reductions and mitigate upwind states', including Pennsylvania's, impact on downwind states' air quality.

D. The June 2016 CAA Section 126(b) Petition from Connecticut

On March 12, 2008, the EPA promulgated a revision to the ozone NAAQS, lowering both the primary and secondary standards to 75 ppb.[5] Subsequently, on June 1, 2016, the state of Connecticut, through the Connecticut Department of Energy and Environmental Protection (Connecticut), submitted a CAA section 126(b) petition alleging that emissions from Brunner Island significantly contribute to nonattainment and/or interfere with maintenance of the 2008 ozone NAAQS in Connecticut.[6] In particular, the petition contends that emissions from Brunner Island significantly contribute to nonattainment and interfere with maintenance of the 2008 ozone NAAQS at six out of 12 ozone monitors in Connecticut. In support of this assertion, the petition contends that emissions from Brunner Island contribute levels equal to or greater than one percent of the 2008 ozone NAAQS to downwind nonattainment and maintenance receptors. The petition further contends that Brunner Island is able to reduce emissions at a reasonable cost using readily available control options. The petition therefore concludes that, consistent with EPA's past approaches to addressing interstate transport of ozone, NO_X emissions from Brunner Island significantly contribute to nonattainment and interfere with maintenance of the 2008 ozone NAAQS in Connecticut. The petition requests that the EPA direct the operators of Brunner Island to reduce NO_X emissions to eliminate this impact.

[5] *See* National Ambient Air Quality Standards for Ozone, Final Rule, 73 FR 16436 (March 27, 2008).

[6] Petition of the State of Connecticut Pursuant to Section 126 of the Clean Air Act, submitted June 1, 2016. The petition is available in the docket for this action.

The petition cites several sources of data for its contention that Brunner is impacting air quality in Connecticut. First, the petition notes that 10 out of 12 air quality monitors in Connecticut were violating the 2008 ozone NAAQS based on 2012-2014 data and preliminary 2013-2015 data available at the time the petition was submitted.[7] The petition further cites to modeling conducted by the EPA to support development of the CSAPR Update to claim that four ozone monitors in Connecticut were projected to have nonattainment or maintenance concerns in 2017.[8]

To support the conclusion that Brunner Island impacts air quality at some of these monitoring sites, Connecticut provides a technical memorandum from Sonoma Technologies, Inc., outlining the results of modeling that analyzed the impact of NO_X emissions from Brunner Island on Connecticut. According to the petition, this modeling shows that emissions from Brunner Island contributed an amount greater than one percent of the 2008 ozone NAAQS at six monitoring sites in Connecticut based on emissions from the facility during the 2011 ozone season, and is therefore linked to Connecticut's air quality problems.

Connecticut further alleges that Brunner Island has cost-effective and readily available control technologies that can reduce its NO_X emissions. The petition first notes that Brunner Island currently has no NO_X post-combustion controls installed at any of the units but that the facility was planning to add the capability to use natural gas fuel at all three of its units by the

[7] Of the 12 monitors in Connecticut, 7 are violating the 2008 ozone NAAQS based on 2014-2016 data. *See* ozone design value table available *at https://www.epa.gov/air-trends/air-quality-design-values#report*.

[8] The petition referred to modeling conducted for purposes of the proposed CSAPR Update in 2015. *See* 80 FR 75706, 75725-726 (December 3, 2015). The EPA conducted updated modeling to support the final rulemaking, which also identified four projected nonattainment and maintenance receptors in 2017. 81 FR 74533.

summer of 2017, and argues that a federally enforceable mechanism to ensure Brunner Island uses natural gas fuel would eliminate Brunner Island's significant contribution to ozone levels in Connecticut. The petition states that current federal and state rules will not require Brunner Island to operate on natural gas, install post-combustion controls, or otherwise limit NO_X emissions beyond previously allowable permit levels. The petition summarizes four potential ways by which Brunner Island could reduce its NO_X emissions: replacing coal combustion with natural gas fuel, modifying its boiler furnace burners and combustion systems to operate at lower flame temperatures, installing selective noncatalytic reduction (SNCR) controls, and installing SCR controls.

The petition further discusses the EPA's then-proposed CSAPR Update. Connecticut suggests that the then-proposed CSAPR Update could not be relied upon to control emissions from Brunner Island because: (1) it was not final at the time the petition was submitted and was therefore uncertain; and (2) the proposed rule would not require Brunner Island to reduce its emissions below the threshold of one percent of the NAAQS. The petition notes that the modeling to support the proposed rule shows four Connecticut monitors with nonattainment and maintenance problems after implementation of the proposed emission budgets. Finally, the petition suggests that the fact that EGUs may trade allowances within and between states could result in emission levels in excess of the state's budget, and thus suggest the rule will likely not affect Brunner Island's emissions. In particular, the petition suggests that this aspect of the CSAPR Update will not reduce emissions from Brunner Island on high electric demand days or days with the highest ozone levels.

Based on the technical support provided in its petition, Connecticut requests that the EPA make a CAA section 126(b) finding and require that Brunner Island comply with emissions

limitations and compliance schedules to eliminate its significant contribution to nonattainment and interference with maintenance in Connecticut.

Section 126(b) of the Act requires the EPA to either make a finding or deny a petition within 60 days of receipt of the petition and after holding a public hearing. However, any action taken by the EPA under CAA section 126(b) is also subject to the procedural requirements of CAA section 307(d). *See* CAA section 307(d)(1)(N). One of these requirements is that the EPA conduct notice-and-comment rulemaking, including issuance of a notice of proposed action, a period for public comment, and a public hearing before making a final determination whether to make the requested finding. In light of the time required for notice-and-comment rulemaking, CAA section 307(d)(10) provides for a time extension, under certain circumstances, for rulemakings subject to the section 307(d) procedural requirements. In accordance with section 307(d)(10), the EPA determined that the 60-day period for action on Connecticut's petition would be insufficient for the EPA to complete the necessary technical review, develop an adequate proposal, and allow time for notice and comment, including an opportunity for public hearing. Therefore, on July 25, 2016, the EPA published a final rule extending the deadline for the EPA to take final action on Connecticut's CAA section 126(b) petition to January 25, 2017.[9]

On April 25, 2017, a coalition of public health, conservation, and environmental organizations submitted letters urging the EPA to immediately grant the pending CAA section 126(b) petitions in front of the agency, including Connecticut's, arguing that the petitions' proposed remedies would also provide critical air quality benefits to the communities surrounding the affected power plants in Indiana, Kentucky, Ohio, Pennsylvania, and West

[9] 81 FR 48348 (July 25, 2016).

Virginia, as well as other downwind states, including New Jersey, New York, Maine, Massachusetts, and Rhode Island.[10] On April 28, 2017, Talen Energy Corp., the owner and operator of Brunner Island, submitted a letter urging the EPA to deny Connecticut's CAA section 126(b) petition due to alleged deficiencies in the petition. The EPA acknowledges receipt of these letters, and has made them available in the docket for this action. However, the EPA is not in this action responding directly to these letters. Rather, the EPA encourages interested parties to review this proposal and then submit relevant comments during the public comment period.

On May 16, 2017, the state of Connecticut filed suit in the U.S. District Court for the District of Connecticut alleging that the EPA failed to take timely action on Connecticut's CAA section 126(b) petition.[11] On February 7, 2018, the court issued an order requiring the EPA to hold a public hearing on the petition within 30 days and to take final action within 60 days of the court's order. *See* Ruling on Motions for Summary Judgment and Motion Concerning Remedy, *State of Connecticut v. EPA*, No. 3:17-cv-00796 (D. Conn. February 7, 2018).

E. The Brunner Island Facility

Brunner Island is a 1,411 megawatt facility with three tangentially-fired steam boiler EGUs, each equipped with low NO_X burner technology with closed-coupled/separated over fire

[10] The EPA has received five CAA section 126(b) petitions from two other states (Delaware and Maryland) regarding the 2008 and 2015 ozone NAAQS, each claiming that one or more specific power plant EGUs in upwind states emit or would emit in violation of the good neighbor provision. However, the EPA notes that this rulemaking only addresses Connecticut's CAA section 126 petition regarding Brunner Island in Pennsylvania and the EPA is not requesting proposing action or requesting comment on the other five petitions.

[11] Two citizen groups, Sierra Club and Connecticut Fund for the Environment, intervened in this case on behalf of the state of Connecticut.

air (LNC3) combustion controls, located in York County in southeastern Pennsylvania.[12] The units were constructed starting in 1961 through 1969. For over 50 years, all three units at Brunner Island have historically burned coal. Brunner Island recently installed a natural gas connection pipeline allowing natural gas to be combusted to serve Brunner Island's electric generators.[13] Following installation of this pipeline, Brunner Island primarily combusted natural gas as fuel during the 2017 ozone season.[14] Using primarily natural gas as fuel during the 2017 ozone season reduced Brunner Island's actual ozone season NO_X emissions to 877 tons in 2017 from 3,765 tons in 2016 and reduced the facility's ozone season NO_X emission rate to 0.090 pounds per millions of British thermal units (lbs/mmBtu) in 2017 from 0.370 lbs/mmBtu in 2016.[15]

III. The EPA's Proposed Decision on Connecticut's CAA Section 126(b) Petition

A. The EPA's Approach for Granting or Denying CAA Section 126(b) Petitions Regarding the 2008 8-hour Ozone NAAQS

[12] For tangentially-fired boiler types, LNC3 is state of the art (*See* sections 3.9.2 and 5.2.1 on pages 3-25 and 5-5 of the Integrated Planning Model (IPM) 5.13 documentation for details about combustion controls. The IPM documentation is available at *https://www.epa.gov/airmarkets/power-sector-modeling-platform-v513*.

[13] The Connecticut CAA section 126(b) petition and the April 28, 2017, letter from Talen Energy Corp. indicate that Brunner Island has taken necessary steps to construct a natural gas pipeline and enable the combustion of natural gas. On June 7, 2016, an article by S&P Global indicated that Talen Energy Corp. is in the process of converting the Brunner Island plant to co-fire with natural gas. These documents are available in the docket for this action.

[14] Hourly emission rates reported to the EPA and fuel usage reported to Environmental Impact Assessment demonstrate Brunner Island predominately used natural gas during the ozone season. The emissions data for 2017 are publicly available at *https://www.epa.gov/ampd* and the fuel usage data are available at *https://www.eia.gov/electricity/data/eia923/*.

[15] These data are publicly available at *https://www.epa.gov/ampd*. *See* Air Markets Program Data in the docket for this proposal.

As described in section II.B of this notice, as an initial matter in reviewing CAA section 126(b) petitions, the EPA evaluates the technical analysis in the petition to see if that analysis, standing alone, is sufficient to support a CAA section 126(b) finding. In this regard, the agency notes that certain elements of the analysis provided in the petition appear to be deficient and thereby the conclusions that the petition draws are not fully supported by Connecticut's technical assessment. For example, in the context of interstate pollution transport, in existing EPA analyses, the agency focuses its analysis on contributions to high ozone days at the downwind receptor. The analysis and metrics provided by the petitioner provide some information on the frequency and magnitude of ozone impacts. However, the information is unclear as to the modeled and/or measured ozone levels on those days.[16] We also note that, the Connecticut petition relied on emissions data from 2011, which may not be representative of current and/or future NO_X emissions and ozone levels in Connecticut, Pennsylvania, and the rest of the region.[17]

Nonetheless, the EPA's primary approach for reviewing the petition involves EPA's independent technical analyses to help evaluate the basis for a potential CAA section 126(b) finding. As described in sections II.A and II.C of this notice, ozone is a regional pollutant and previous EPA analyses and regulatory actions have evaluated the regional interstate ozone transport problem using a four-step regional analytic framework.

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[16] Table two in the Sonoma Technologies, Inc. technical memorandum that supports Connecticut's petition indicates that the "maximum number of days any one monitor [in Connecticut] had a significant ozone contribution" was two.

[17] The Connecticut petition relies on air quality modeling that uses 2011 emissions data. As an example of how emissions have changed between 2011 and a recent historical year, the EPA notes that Pennsylvania's 2017 EGU NO_X ozone season emissions were 79 percent below 2011 levels. Brunner Island is located in Pennsylvania, which as a facility reduced its ozone season NO_X emissions by 88 percent in 2017 relative to 2011 levels (*https://www.epa.gov/ampd*).

The EPA applied this four-step framework in the promulgation of the CSAPR Update under CAA section 110(a)(2)(D)(i)(I) to at least partially address interstate transport with respect to the 2008 ozone NAAQS. The CSAPR Update was promulgated in 2016 and finalized EGU NO_X ozone season emission budgets to address the good neighbor provision for the 2008 ozone NAAQS. While CAA section 126(b) differs from CAA section 110(a)(2)(D)(i)(I) in that CAA section 126(b) gives states the ability to petition the EPA regarding compliance with the good neighbor provision by a single source or group of sources, CAA section 126(b) specifically cross-references the substantive prohibitions of the good neighbor provision. To that end, CAA sections 110(a)(2)(D)(i)(I) and 126(b) both represent mechanisms to address the same functional prohibition of emissions activity from upwind states that will contribute significantly to nonattainment or interfere with maintenance of the NAAQS in a downwind state.

Given the specific cross-reference in CAA section 126(b) to the substantive prohibition in CAA section 110(a)(2)(D)(i)(I), as discussed in section II.B of this notice in more detail, the EPA believes any prior findings made under the good neighbor provision are informative – if not determinative – for a CAA section 126(b) action, and thus the EPA's four-step approach under CAA section 110(a)(2)(D)(i)(I) is also appropriate for evaluating under CAA section 126(b) whether a source or group of sources will significantly contribute to nonattainment or interfere with maintenance of the 2008 8-hour ozone NAAQS in a petitioning state. Because the EPA interprets significant contribution to nonattainment and interference with maintenance to mean the same thing under both provisions, the EPA's decision whether to grant or deny a CAA section 126(b) petition regarding the 2008 8-hour ozone NAAQS depends on whether there is a downwind air quality problem in the petitioning state (i.e., step one of the four-step framework); whether the upwind state where the source subject to the petition is located is linked to the

downwind air quality problem (i.e., step two); and, if such a linkage exists, whether there are additional feasible and cost-effective emission reductions achievable at the source(s) named in the CAA section 126(b) petition (i.e., step three).

B. The EPA's Proposal to Deny Connecticut's CAA Section 126(b) Petition

As described earlier in section II.C of this notice, the EPA has determined that a state may contribute significantly to nonattainment or interfere with maintenance of the 2008 ozone NAAQS where emissions from the state impact a downwind air quality problem (nonattainment or maintenance receptor) at a level exceeding a one percent contribution threshold, and where the sources in the state can implement emission reductions through highly cost-effective control measures. *See EPA v. EME Homer City Generation, L.P.*, 134 S. Ct. at 1606-07.

The EPA has already conducted such an analysis for the 2008 ozone NAAQS with respect to Pennsylvania's impact on receptors in Connecticut. As the petitioners note, the EPA determined that, based on 2017 modeling projections, Pennsylvania was linked to four air quality monitors in Connecticut expected to have nonattainment or maintenance concerns. However, contrary to the assertions made in Connecticut's petition, the one percent threshold used in step two in the CSAPR Update did not alone represent emissions that were considered to "contribute significantly" or "interfere with maintenance" of the NAAQS. The conclusion that a state's emissions met or exceeded this threshold only indicated that further analysis was appropriate to determine whether any of the upwind state's emissions met the statutory criteria of significantly contributing to nonattainment or interfering with maintenance. As discussed in more detail in section II.C, this further analysis in step three considers cost, technical feasibility and air quality factors to determine whether any emissions deemed to contribute to the downwind air quality factor must be controlled pursuant to the good neighbor provision. Thus, while the EPA's

modeling conducted for the CSAPR Update did link emissions from Pennsylvania to nonattainment and maintenance receptors in Connecticut in 2017, this does not conclude the determination as to whether Brunner Island is operating in violation of the good neighbor provision with respect to the 2008 ozone NAAQS.

Similarly, and for the same reasons, the impact of a single source on downwind air quality is not necessarily determinative of whether that source emits or would emit in violation of the good neighbor provision. Thus, the modeling summary provided by Connecticut regarding Brunner Island's potential impact on Connecticut monitors does not indicate whether in step three of the EPA's framework there are feasible and highly cost-effective emission reductions available at Brunner Island such that EPA could determine that this facility emits or would emit in violation of the good neighbor provision.

With respect to the question of whether there are feasible and highly cost-effective NOx emission reductions available at Brunner Island, CAA section 126(b) indicates that a petitioner must demonstrate that a major source or group of stationary sources "emits or would emit" any air pollutant in violation of the prohibition of CAA section 110(a)(2)(D)(i)(I). Congress did not specify the intended meaning for these terms in either CAA section 126(b) itself or the legislative history for this provision. Therefore, in the context of this response to Connecticut's CAA section 126(b) petition regarding Brunner Island for the 2008 ozone NAAQS, the EPA reasonably and appropriately proposes to interpret these ambiguous terms in a particular way given the facility's existing operating conditions, as further described later in this section, and consistent with EPA's historical approach to evaluating interstate ozone pollution transport under the good neighbor provision. Specifically, the EPA is proposing to interpret the phrase "emits or would emit" in this context to mean, first, that a source may "emit" in violation of the good

neighbor provision if, based on current emission levels, the upwind state contributes to downwind air quality problems and the source may be further controlled through implementation of highly cost-effective controls; and, second, that a source "would emit" in violation of the good neighbor provision if, based on reasonably anticipated future emission levels (accounting for existing conditions), the upwind state contributes to downwind air quality problems and the source could be further controlled through implementation of highly cost-effective controls. This interpretation is consistent with EPA's historic approach to addressing ozone transport under the good neighbor provision wherein EPA's ozone transport air quality and NO_X reduction potential analyses have used future emission projections that were derived considering recent and projected emission levels. Accordingly, the EPA believes it is reasonable to interpret the CAA section 126(b) requirements for ozone transport in a consistent manner. Consistent with this interpretation, the EPA has therefore evaluated whether Brunner Island emits or would emit in violation of the good neighbor provision based on both current and future anticipated emission levels.

As described in more detail later in this section, Brunner Island primarily burned natural gas with a low NO_X emission rate in the 2017 ozone season and the EPA expects the facility to continue operating primarily by burning natural gas in future ozone seasons. As such, the EPA does not find at this time that there are additional feasible and highly cost-effective NO_X emission reductions available at Brunner Island. The EPA is therefore proposing to determine, based on this context, that Brunner Island does not and would not "emit" in violation of the good neighbor provision with respect to the 2008 ozone NAAQS.

Connecticut's CAA section 126(b) petition first proposes that the operation of natural gas is an available cost-effective emission reduction measure that could be implemented at Brunner

Island. As noted previously, Brunner Island completed construction of a natural gas pipeline connection prior to the beginning of the 2017 ozone season (i.e., by May 1, 2017). Brunner Island operated primarily using natural gas as fuel for the 2017 ozone season. As a result, Brunner Island's actual ozone season NOx emissions declined from 3,765 tons in 2016 to 877 tons in 2017, and the facility's ozone season NO_X emission rate declined from 0.370 lbs/mmBtu in 2016 to 0.090 lbs/mmBtu in 2017. Thus, Brunner Island has already implemented the emission reductions consistent with what Connecticut asserted would qualify as a cost-effective strategy for reducing NO_X emissions. Connecticut's section 126(b) petition does not demonstrate that, at this current level of emissions, Brunner Island "emits" in violation of the good neighbor provision.

The EPA also believes that Brunner Island will likely continue to primarily use natural gas as fuel during future ozone seasons for several reasons. First, compliance with the CSAPR Update provides an economic incentive to cost-effectively reduce NO_X emissions. Specifically, Brunner Island's participation in the CSAPR NO_X ozone season Group 2 allowance trading program provides an economic incentive to produce electricity in ways that lower ozone-season NO_X, such as by burning natural gas relative to burning coal at this particular power plant. Under the CSAPR Update, each ton of NO_X emitted by a covered EGU has an economic value—a direct cost in the case that a power plant must purchase an allowance to cover that ton of emissions for CSAPR Update compliance or an opportunity cost in the case that a power plant must use an allowance that is in its account for compliance and thereby foregoes the opportunity to sell that allowance on the market. The EPA notes that Brunner Island's 2017 emissions would have been approximately 2,714 tons more than its actual 2017 emissions if it had operated as a

coal-fired generator, as it did in 2016.[18] This reduction in NO_X emissions that is attributable to primarily burning natural gas has an economic value in the CSAPR allowance trading market.

Second, there are continuing fuel-market based economic incentives suggesting that Brunner Island will primarily burn natural gas during the ozone season. Brunner Island elected to add the capability to primarily utilize natural gas by way of a large capital investment in a new natural gas pipeline capacity connection. Brunner Island's operators would have planned for and constructed this project during the recent period of relatively low natural gas prices. In the years preceding the completion of this natural gas pipeline connection project, average annual natural gas prices ranged from $2.52/mmBtu to $4.37/mmBtu (i.e., between 2009 and 2016).[19] The capital expenditure to construct a natural gas pipeline connection suggests that natural gas prices within this range make it economic (i.e., cheaper) for Brunner Island to burn natural gas to generate electricity relative to burning coal. As such, future natural gas prices in this same range suggest that Brunner Island will continue to primarily burn natural gas during future ozone seasons. The EPA and other independent analysts expect future natural gas prices to remain low and within this 2009 to 2016 range due both to supply and distribution pipeline build-out. For example, the Energy Information Administration's (EIA) 2018 Annual Energy Outlook (AEO) natural gas price projections for Henry Hub spot price range from $3.06/mmBtu in 2018 to

[18] This estimated emissions difference was calculated as the difference between 2017 reported NO_X emissions and a counterfactual 2017 NO_X emissions estimate using 2017 operations (i.e., heat input), multiplied by the 2016 NO_X emission rate reflecting coal-fired generation.
[19] In the 2018 reference case Annual Energy Outlook (AEO) released February 6, 2018, created by the U.S. Energy Information Administration (EIA), natural gas prices for the power sector for 2018 through 2023. Available at *https://www.eia.gov/outlooks/aeo/data/browser/#/?id=13-AEO2018&cases=ref2018&sourcekey=0*.

$3.83/mmBtu in 2023.[20] Moreover, the AEO short-term energy outlook and New York Mercantile Exchange futures further support the estimates of a continued low-cost natural gas supply.[21] These independent analyses of fuel price data and projections lead to the EPA's expectation that fuel-market economics will continue to support Brunner Island's primarily burning natural gas during future ozone seasons through at least 2023. Taken together with projected continued broader downward trends in NO_X emissions resulting in improved air quality in Connecticut, the EPA expects that Connecticut's ozone nonattainment and maintenance problems will be resolved in the future and that Brunner Island will likely continue to primarily burn natural gas during the ozone season until that time.

The context in which Brunner Island installed natural gas-firing capability and burned natural gas is consistent with observed recent trends in natural gas utilization within the power sector, suggesting that Brunner Island's economic situation in which it primarily burns gas as fuel during the ozone season is not unique or limited. Comparing total heat input from 2014 with 2017 for all units that utilize natural gas and report to the EPA's Clean Air Markets Division, historical data showed an increased use of natural gas of 14 percent.[22] This overall increase results from both an increase in capacity from the construction of additional units and an

[20] Projected delivered natural gas prices for the power sector in the Middle Atlantic region, where Brunner Island is located, ranged between $3.56 in 2018 and $3.99/mmBtu in 2023. The projected delivered coal prices for the Middle Atlantic remain relatively constant, ranging from $2.51 to $2.56/mmBtu. *https://www.eia.gov/outlooks/aeo/data/browser/#/?id=3-AEO2018&region=1-2&cases=ref2018&start=2016&end=2023&f=A&linechart=ref2018-d121317a.3-3-AEO2018.1-2&map=ref2018-d121317a.4-3-AEO2018.1-2&sourcekey=0* and *http://tonto.eia.gov/dnav/ng/hist/rngwhhda.htm*.

[21] AEO short-term energy outlook available at *https://www.eia.gov/outlooks/steo/report/natgas.php*.

[22] From 8.4 billion mmBtu to 9.6 billion mmBtu. *See* EPA's Clean Air Markets Division data at *https://ampd.epa.gov/ampd/*.

increased gas-fired utilization capacity factor. The available heat input capacity increased six percent while average capacity factor based on heat input increased by eight percent (23 percent to 25 percent).

Accordingly, based on this information demonstrating that Brunner Island can be expected to continue to primarily operate using natural gas fuel in the future, the EPA cannot conclude that the facility "would emit" in violation of the good neighbor provision with respect to the 2008 ozone NAAQS. The EPA notes that Connecticut's petition relied on emission data from 2011 to attempt to demonstrate that Brunner Island is significantly contributing to nonattainment or interfering with maintenance. In light of recent changes in Brunner Island's operations, the EPA does not believe this information provides a current, reasonable estimate of how much NO_X pollution Brunner Island emits or would emit currently or in the future.[23]

We do not agree with the petition to the extent that it asserts that the ability to buy and bank allowances in the CSAPR Update's ozone season NO_X allowance trading program will incentivize Brunner Island to increase its emissions. Connecticut fails to support its contention and thus does not meet the demonstration burden imposed on CAA section 126(b) petition. Moreover, Brunner Island's 2017 emission levels demonstrate that, contrary to Connecticut's assertions, Brunner Island reduced emissions while operating in the context of the CSAPR Update allowance trading program. This is also true for EGUs in Pennsylvania more broadly, which had collective emissions of 13,646 tons, well below the Pennsylvania budget of 17,952 tons. The petition also fails to support its contention that Brunner Island's participation in the

[23] As noted above, Pennsylvania's 2017 EGU NO_X ozone season emissions were 79 percent below 2011 levels. Brunner Island is located in Pennsylvania, which as a facility reduced its ozone season NO_X emissions by 88 percent in 2017 relative to 2011 levels. Data regarding Brunner Island emissions available at *https://www.epa.gov/ampd*.

allowance trading program will result in increased emissions on days with either high electricity demand or days with the highest ozone levels.

Finally, to the extent that Connecticut identifies other control strategies that could potentially be implemented at Brunner Island in order to reduce NO_X emissions, including modifications to combustion controls or implementation of post-combustion controls like SCRs and SNCRs, the petition does not include any information or analysis regarding the costs of such controls nor does it demonstrate that such controls are highly cost effective considering potential downwind air quality impacts. As noted previously, in the CSAPR Update, the EPA quantified upwind states' obligations under the good neighbor provision based on emission reductions available at a marginal cost of $1,400/ton of NO_X reduced. EPA's analysis showed that additional NO_X reductions at EGUs, including installation of new SCRs and SNCRs at EGUs that lacked post-combustion controls, would be more expensive.[24] The cost of such new post-combustion controls at Brunner Island would likely be even more expensive considering current and anticipated emissions rates.

Under the EPA's approach to quantifying those amounts of emissions that significantly contribute to nonattainment or interfere with maintenance, the dollar-per-ton cost of reducing emissions is balanced against two air quality factors: the amount of NO_X emission reductions available using a particular control strategy and the downwind reductions in ozone at identified receptors that would result from the emission reductions. Connecticut has not attempted to evaluate what reductions in ozone would accrue from these additional control strategies and thus has not demonstrated that the additional costs associated with these controls would be justified

[24] *See* EGU NO_X Mitigation Strategies Final Rule Technical Support Document available at *https://www.regulations.gov*, Docket ID No. EPA-HQ-OAR-2015-0500-0554.

by the downwind reductions in ozone. Indeed, the petition includes no analysis of how downwind air quality would be impacted by the emission reductions it contends are necessary under the good neighbor provision. This element is not only key to EPA's interpretation of the good neighbor provision as it applies step three to ozone pollution transport, but necessary to ensure that upwind emissions are not reduced by more than necessary to improve downwind air quality, consistent with the Supreme Court's holding in *EPA v. EME Homer City Generation, L.P.*, 134 S. Ct. at 1604 n.18, 1608-09. Recent EPA analyses that projects emission levels to a future year indicates that no air quality monitors in Connecticut are projected to have nonattainment or maintenance problems with respect to the 2008 ozone NAAQS by 2023.[25] While this modeling is not necessarily determinative of whether Brunner Island emits or would emit in violation of the good neighbor provision before 2023, it does suggest that, by that date, it may no longer be necessary to further reduce emissions from any state to ensure attainment of the 2008 ozone NAAQS in Connecticut.

Based on the information discussed in this notice, the EPA proposes to deny the petition because Connecticut has not met its burden to demonstrate that Brunner Island emits or would

[25] *See* Supplemental Information on the Interstate Transport State Implementation Plan Submissions for the 2008 Ozone National Ambient Air Quality Standards under Clean Air Act Section 110(a)(2)(D)(i)(I) (October 2017), available in the docket for this proposed action. The EPA is not making any final determination regarding future downwind air quality in this action, and is therefore not requesting comment on the air quality modeling presented in the October 2017 memorandum.

emit in violation of the good neighbor provision with respect to the 2008 ozone NAAQS.[26] The EPA also proposes to find, based on its own analysis, that there are no additional cost-effective measures available at the source, and thus Brunner Island does not emit nor would it emit in violation of the good neighbor provision with respect to the 2008 ozone NAAQS. These proposed determinations are based on the fact that Brunner Island combusted primarily natural gas in the 2017 ozone season, resulting in a low NO_X emission rate for this facility, as well as the expectation that future operation will be consistent with 2017 operations. The EPA requests comment on its proposed denial of Connecticut's section 126(b) petition, including the bases for the decision described herein.

IV. Statutory Authority

42 U.S.C. §§ 7410, 7426, 7601.

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Dated:

_____

E. Scott Pruitt,
Administrator.

[26] As previously discussed, the petition correctly identifies that Pennsylvania is linked to downwind air quality problems in Connecticut, and has been included in the CSAPR Update with respect to its downwind impacts on Connecticut's attainment of the 2008 ozone NAAQS. While this action proposes to determine that no further controls are necessary to ensure that Brunner Island does not and would not "emit" in violation of the good neighbor provision for the 2008 ozone NAAQS with respect to Connecticut, this proposal does not make any broader determination as to the good neighbor obligation for Pennsylvania.