

The EPA Administrator, E. Scott Pruitt, signed the following notice on 04/06/2018, and EPA is submitting it for publication in the *Federal Register* (FR). While we have taken steps to ensure the accuracy of this Internet version, it is not the official version of the final action. Please refer to the official version in a forthcoming FR publication, which will appear on the Government Printing Office's FDSys website (<http://gpo.gov/fdsys/search/home.action>) and on Regulations.gov (<http://www.regulations.gov>) in Docket No. EPA-HQ-OAR-2016-0347. Once the official version of this document is published in the FR, this version will be removed from the Internet and replaced with a link to the official version.

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 Final Action on Petition.

**SUMMARY:** The Environmental Protection Agency (EPA) is denying 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 the EPA make a finding that emissions from Brunner Island Steam Electric Station (Brunner Island), located in York County, Pennsylvania, significantly contribute to nonattainment and interfere 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 is denying the petition based on the conclusion that Connecticut has not demonstrated and the EPA has not determined that the Brunner Island facility emits or would emit pollution in violation of the good neighbor provision with respect to the 2008 ozone NAAQS.

**DATES:** This final action is effective on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**

**ADDRESSES:** The EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2016-0347. All documents in the docket are listed and publicly available at

<http://www.regulations.gov>. Although listed in the index, some information is not publicly available, i.e., Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in the docket or in hard copy at the EPA Docket Center, William Jefferson Clinton (WJC) West Building, Room 3334, 1301 Constitution Avenue, NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Office of Air and Radiation Docket and Information Center is (202) 566-1742.

**FOR FURTHER INFORMATION CONTACT:** Questions concerning this final action 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](mailto:gabrilovich.lev@epa.gov).

**SUPPLEMENTARY INFORMATION:**

The information in this document is organized as follows:

- I. Executive Summary of the EPA's Decision on Connecticut's CAA Section 126(b) Petition
- II. Background and Legal Authority
  - A. Ozone and Public Health
  - B. Clean Air Act Sections 110 and 126
  - C. The EPA's Historical Approach to Addressing Interstate Transport of Ozone under the Good Neighbor Provision
  - D. The June 2016 CAA Section 126(b) Petition from Connecticut and Related Actions
- III. The EPA's Decision on Connecticut's CAA Section 126(b) Petition
  - A. Summary of the EPA's Proposed Action
  - B. The EPA's Standard for Reviewing Connecticut's CAA Section 126(b) Petition Regarding the 2008 8-hour Ozone NAAQS
  - C. The EPA's Analysis of Connecticut's CAA Section 126(b) Petition
  - D. Public Comments

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- IV. Final Action to Deny Connecticut's 126(b) Petition
- V. Judicial Review

**I. Executive Summary of the EPA's Decision on Connecticut's CAA Section 126(b) Petition**

In June 2016, the state of Connecticut, through the Connecticut Department of Energy and Environmental Protection (Connecticut), submitted a petition requesting that the EPA make a finding pursuant to CAA section 126(b) that emissions from Brunner Island Steam Electric Station (Brunner Island), located in York County, Pennsylvania, significantly contribute to nonattainment and/or interfere with maintenance of the 2008 ozone NAAQS in Connecticut in violation of CAA section 110(a)(2)(D)(i)(I), otherwise known as the good neighbor provision. The petition further requests that the EPA order Brunner Island to reduce its oxides of nitrogen (NO<sub>x</sub>) emissions. On February 22, 2018, the EPA issued a proposal to deny the CAA section 126(b) petition. 83 FR 7710. The Agency solicited comments on the proposal. In response, the EPA received oral testimony from four speakers at a public hearing on the proposal on February 23, 2018. The EPA also received 27 comments submitted to the docket on the proposed denial. This *Federal Register* notice finalizes EPA's action on Connecticut's CAA section 126(b) petition and addresses major comments the Agency received. The remaining comments are addressed in the Response to Comment (RTC) document available in the docket for this action.

In this final action, the EPA is denying the petition requesting that the EPA make a finding that emissions from Brunner Island significantly contribute to nonattainment and interfere with maintenance of the 2008 ozone NAAQS in Connecticut in violation of the good neighbor provision. In making this final decision, the EPA reviewed the incoming petition, the public comments received, the relevant statutory authorities, and other relevant materials. The This document is a prepublication version, signed by EPA Administrator, E. Scott Pruitt on 04/06/2018. We have taken steps to ensure the accuracy of this version, but it is not the official version.

EPA evaluated Connecticut's petition and determined that the state has not met its burden to demonstrate that Brunner Island emits or would emit in violation of the good neighbor provision with respect to the 2008 ozone NAAQS. As discussed in further detail in section III, the state's analysis of Brunner Island's impact on air quality in Connecticut provides insufficient information regarding the source's impact on Connecticut air quality on high ozone days and it does not reflect the facility's current operations. Moreover, the petition does not evaluate the potential costs and air quality benefits that would inform the EPA's evaluation of whether additional emission reductions are cost effective, consistent with the EPA's interpretation of the good neighbor provision. The EPA also finds, based on its own supplemental analysis, that there are no additional highly cost-effective controls available at the source and thus no basis to determine that Brunner Island emits or would emit in violation of the good neighbor provision with respect to the 2008 ozone NAAQS. As discussed in section III, Brunner Island recently installed a natural gas connection pipeline that allows natural gas to be combusted to serve Brunner Island's electric generators. Combusting gas at Brunner Island has significantly reduced the facility's NO<sub>x</sub> emissions. Accordingly, the EPA denies Connecticut's CAA section 126(b) 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 NO<sub>x</sub> and volatile organic compounds (VOCs) in the presence of sunlight. These precursor emissions can be transported downwind directly or, after transformation in the atmosphere, as ozone. As a result, ozone formation, atmospheric residence, and transport can occur on a regional scale (i.e., hundreds of miles). For a discussion of ozone-formation chemistry, interstate transport issues, and health effects, *see* the Cross-State Air  
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Pollution Rule Update for the 2008 Ozone NAAQS (CSAPR Update). 81 FR 74504, 74513-4 (October 26, 2016).

*B. Clean Air Act Sections 110 and 126*

The statutory authority for this action is provided by 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).<sup>1</sup> Petitions submitted pursuant to this section are commonly referred to as CAA section 126(b) petitions. Similarly, 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 CAA section 126(b) findings.

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 three months if the source complies with emission limitations and

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<sup>1</sup> 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).

compliance schedules provided by the EPA to bring about compliance with the requirements contained in CAA sections 110(a)(2)(D)(i) and 126 as expeditiously as practicable but no later than three years from the date of the finding. *Id.*

Section 110(a)(2)(D)(i) of the CAA, often referred to as the “good neighbor” 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) require all states, within three 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 various ozone NAAQS. The EPA’s most recent rulemaking, the 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).

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

Given that formation, atmospheric residence, and transport of ozone 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<sub>x</sub> emissions. In developing these rulemakings, the EPA has typically found that downwind states’ problems attaining and maintaining the ozone

NAAQS result, in part, from the contribution of pollution from multiple upwind sources located in different upwind states.

The EPA has promulgated four regional interstate transport rulemakings that have addressed the good neighbor provision with respect to various ozone NAAQS considering the regional nature of ozone transport. 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 (referred to as “receptors”) considering monitored ozone data where appropriate and air quality modeling projections to a future compliance year. Pursuant to the opinion in *North Carolina v. EPA*, 531 F.3d 896, 908-911 (D.C. Cir. 2008), the Agency identified areas expected to be in nonattainment with the ozone NAAQS and those areas that may struggle to maintain the NAAQS;

(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 the EPA’s most recent rulemakings, the EPA identified such upwind states to be those modeled to contribute at or above a threshold equivalent to one percent of the applicable NAAQS.

(3) for states linked to downwind air quality problems, identifying upwind emissions on a statewide basis that will 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- and air quality-based criteria to quantify the amount of a linked upwind state's emissions that must be prohibited pursuant to the good neighbor provision; 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.

The EPA's first such rulemaking, the NO<sub>x</sub> SIP Call, addressed interstate transport with respect to the 1979 ozone NAAQS. 63 FR 57356 (October 27, 1998). The EPA concluded in the NO<sub>x</sub> 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 NO<sub>x</sub> SIP Call promulgated statewide emission budgets and required upwind states to adopt SIPs that would decrease NO<sub>x</sub> emissions by amounts that would meet these budgets, thereby eliminating the emissions that significantly contribute to nonattainment or interfere with maintenance of the ozone NAAQS in downwind states. The EPA also promulgated a model rule for a regional allowance trading program called the NO<sub>x</sub> Budget Trading Program that states could adopt in their SIPs as a mechanism to achieve some or all of the required emission reductions. All of the jurisdictions covered by the NO<sub>x</sub> SIP Call ultimately chose to adopt the NO<sub>x</sub> Budget Trading Program into their SIPs. The NO<sub>x</sub> SIP Call was upheld by the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit) in all pertinent respects. *See Michigan v. EPA*, 213 F.3d 663 (2000).



In coordination with the NO<sub>x</sub> 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 addressed by the NO<sub>x</sub> SIP Call (i.e., interstate ozone transport for the 1979 ozone NAAQS). 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<sub>x</sub> 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 (May 25, 1999). In making these technical determinations, the EPA concluded that the NO<sub>x</sub> 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. However, subsequent litigation over the NO<sub>x</sub> SIP Call led the EPA to “de-link” the CAA section 126(b) petition response from the NO<sub>x</sub> SIP Call, and the EPA made final CAA section 126(b) findings for 12 states and the District of Columbia. The EPA found that sources in these 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 required 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<sub>x</sub> Budget Trading Program model rule provided under the NO<sub>x</sub> SIP Call. 65 FR 2674 (January 18, 2000). The

EPA's action on these section 126(b) petitions was upheld by the D.C. Circuit. *See Appalachian Power*, 249 F.3d 1032.

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 fine particulate matter (PM<sub>2.5</sub>) NAAQS. The EPA adopted the same framework for quantifying the level of states' significant contribution to downwind nonattainment in CAIR as it used in the NO<sub>x</sub> SIP Call, based on the determination in the NO<sub>x</sub> 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). 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.” 70 FR 25186. CAIR included two distinct regulatory processes – (1) 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, and (2) a regulation to promulgate, where necessary, federal implementation plans (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<sub>x</sub> 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 NAAQS and the 1997 PM<sub>2.5</sub> NAAQS in North Carolina. Citing the analyses conducted to support the promulgation of

CAIR, the EPA denied North Carolina's CAA section 126(b) petition in full based on a determination that either the named states were not adversely impacting downwind air quality in violation of the good neighbor provision or such impacts were fully remedied by implementation of the emission reductions required by the CAIR FIPs. 71 FR 25328, 25330.

The D.C. Circuit found that EPA's approach to section 110(a)(2)(D)(i)(I) in CAIR was "fundamentally flawed" in several respects, and the rule was remanded in July 2008 with the instruction that the EPA replace the rule "from the ground up." *North Carolina v. EPA*, 531 F.3d at 929. The decision did not find fault with the EPA's general multi-step framework for addressing interstate ozone transport, but rather concluded EPA's analysis did not address all elements required by the statute. The EPA's separate action denying North Carolina's CAA section 126(b) petition was not challenged.

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<sub>2.5</sub> NAAQS as CAIR and, in addition, addressed interstate transport for the 2006 PM<sub>2.5</sub> NAAQS by requiring 28 states to reduce sulfur dioxide (SO<sub>2</sub>) emissions, annual NO<sub>x</sub> emissions, and/or ozone season NO<sub>x</sub> 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<sub>x</sub> 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<sub>2.5</sub> and ozone at downwind locations and that the total amount of transport is composed of the individual contribution from numerous upwind states." 76 FR 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 to reduce statewide emission levels. CSAPR was subject to nearly four years of litigation in which the Supreme Court upheld the 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. *See EPA v. EME Homer City Generation, L.P.*, 134 S. Ct. 1584, 1607-1609 (2014).<sup>2</sup>

Most recently, the EPA promulgated the CSAPR Update to address the good neighbor provision requirements for the 2008 ozone NAAQS, the same NAAQS at issue in the Connecticut section 126(b) petition. 81 FR 74504 (October 26, 2016). The final CSAPR Update built upon previous efforts to address the collective contributions of ozone pollution from 22 states in the eastern U.S. to widespread downwind air quality problems, including the NO<sub>x</sub> SIP Call, CAIR, and the original CSAPR. As was also the case for the previous rulemakings, the EPA identified emissions from large EGUs as significantly contributing and/or interfering with maintenance based on cost and air quality factors. The CSAPR Update finalized EGU NO<sub>x</sub> 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<sub>x</sub> reduced. This level of control stringency represented ozone season NO<sub>x</sub> reductions that could be achieved in the 2017 analytic year, which was relevant to the upcoming 2018 attainment date for moderate ozone nonattainment areas, and included the potential for operating and optimizing existing selective catalytic reduction (SCRs) post-combustion controls; installing state-of-the-art NO<sub>x</sub> combustion

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<sup>2</sup> On remand from the Supreme Court, the D.C. Circuit further affirmed various aspects of the CSAPR, and also remanded the rule without vacatur for reconsideration of certain states' emissions budgets. *EME Homer City Generation, L.P. v. EPA*, 795 F.3d 118 (2015). The EPA addressed the remand in several rulemaking actions in 2016 and 2017.

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controls; and shifting generation to existing units with lower NO<sub>x</sub> 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<sub>x</sub> Ozone Season Group 2 allowance trading program. The CSAPR trading programs and the EPA's prior emission trading programs (e.g., the NO<sub>x</sub> Budget Trading Program associated with the NO<sub>x</sub> SIP Call) have provided 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 have also provided 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.

In finalizing the CSAPR Update, the EPA determined the rule may only be a partial resolution of the good neighbor obligation for many states, including Pennsylvania, and that the emission reductions required by the rule “may not be all that is needed” to address transported emissions.<sup>3</sup> 81 FR 74521-522 (October 26, 2016). The EPA noted that the information available at that time indicated that downwind air quality problems would remain in 2017 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<sub>x</sub> reductions

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<sup>3</sup> The EPA determined that the emission reductions required by the CSAPR Update were the full scope of the good neighbor obligation for Tennessee with respect to the 2008 ozone NAAQS. 81 FR 74551-522.

and further EGU control strategies (i.e., the implementation of new post-combustion controls) that are achievable on longer timeframes after the 2017 analytic year.

Of particular relevance to this action, 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 air quality modeling projections to 2017. 81 FR 74538-539. The EPA found there were cost-effective emission reductions that could be achieved within Pennsylvania at a marginal cost of \$1,400 per ton, 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 the EPA's trading program under the CSAPR Update beginning with the 2017 ozone season. This emission budget was imposed to achieve necessary emission reductions and mitigate Pennsylvania's impact on downwind states' air quality in time for the July 2018 moderate area attainment date for the 2008 ozone NAAQS.

D. *The June 2016 CAA Section 126(b) Petition from Connecticut and Related Actions*

On March 12, 2008, the EPA promulgated a revision to the ozone NAAQS, lowering both the primary and secondary standards to 75 parts per billion (ppb).<sup>4</sup> Subsequently, on June 1, 2016, 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.<sup>5</sup> Brunner Island is a 1,411 megawatt facility with three tangentially-fired steam boiler EGUs, each equipped with low NO<sub>x</sub> burner technology with closed-coupled/separated over fire air (LNC3) combustion controls, located in York County in

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<sup>4</sup> See National Ambient Air Quality Standards for Ozone, Final Rule, 73 FR 16436 (March 27, 2008).

<sup>5</sup> 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.

southeastern Pennsylvania.<sup>6</sup> 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.<sup>7</sup> Following installation of this pipeline, Brunner Island primarily combusted natural gas as fuel during the 2017 ozone season.<sup>8</sup> Using primarily natural gas as fuel during the 2017 ozone season reduced Brunner Island's actual ozone season NO<sub>x</sub> emissions to 877 tons in 2017 from 3,765 tons in 2016 and reduced the facility's ozone season NO<sub>x</sub> emission rate to 0.090 pounds per millions of British thermal units (lbs/mmBtu) in 2017 from 0.370 lbs/mmBtu in 2016.<sup>9</sup>

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

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<sup>6</sup> For tangentially-fired boiler types, LNC3 is state of the art control technology. *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>.

<sup>7</sup> 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. The Connecticut CAA section 126(b) petition and an 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. Talen Energy Corp. comments on this action, submitted on March 26, 2018, confirm that this natural gas conversion project was completed in 2017. These documents are available in the docket for this action.

<sup>8</sup> Hourly emission rates reported to the EPA and fuel usage reported to the U.S. Energy Information Administration (EIA) demonstrate Brunner Island predominately used natural gas during the ozone season. The emission 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/>.

<sup>9</sup> These data are publicly available at <https://www.epa.gov/ampd>. *See* Air Markets Program Data in the docket for this proposal.

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 NO<sub>x</sub> 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<sub>x</sub> emissions to eliminate this impact.

The petition cites several sources of data for its contention that Brunner Island 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.<sup>10</sup> 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.<sup>11</sup>

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<sub>x</sub> 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

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<sup>10</sup> Of the twelve monitors in Connecticut, seven 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>.

<sup>11</sup> 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.



monitoring sites in Connecticut based on emissions from the facility during the 2011 ozone season and that Brunner Island 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<sub>x</sub> emissions. The petition first notes that Brunner Island currently has no NO<sub>x</sub> 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 summer of 2017. The petition summarizes four potential ways by which Brunner Island could reduce its NO<sub>x</sub> 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. In particular, the petition contends 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<sub>x</sub> emissions beyond previously allowable permit levels.

The petition 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;<sup>12</sup> 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 that the four Connecticut monitors will continue to have nonattainment and maintenance problems after implementation of the

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<sup>12</sup> The final CSAPR Update was promulgated a few months later. 81 FR 74504 (October 26, 2016).

proposed emission budgets. Finally, the petition suggests that, because EGUs may trade allowances within and between states, this could result in emission levels in excess of the state's budget, and thus the petition suggests 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 electricity 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 emission limitations and compliance schedules to eliminate its significant contribution to nonattainment and interference with maintenance in Connecticut.

Subsequent to receiving Connecticut's petition, the EPA published a final rule extending the statutory deadline for the Agency to take final action. 81 FR 48348 (July 25, 2016). 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). This section requires 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. The notice extending the deadline can also be found in the docket for this rulemaking.

When the EPA had not acted by that date, 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.<sup>13</sup> 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, *Connecticut v. EPA*, No. 3:17-cv-00796 (D. Conn. February 7, 2018). Consistent with the court's order, the EPA held a public hearing on the proposed action on February 23, 2018. 83 FR 6490 (February 14, 2018).

On April 25, 2017, a coalition of public health, conservation, and environmental organizations submitted a letter urging the EPA to immediately grant several CAA section 126(b) petitions pending before 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 Virginia, as well as other downwind states, including New Jersey, New York, Maine, Massachusetts, and Rhode Island.<sup>14</sup> On April 28, 2017, Talen Energy Corp., the owner and

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<sup>13</sup> Two citizen groups, Sierra Club and Connecticut Fund for the Environment, intervened in this case on behalf of Connecticut.

<sup>14</sup> The EPA had received five additional CAA section 126(b) petitions at the time of the proposal 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. The EPA notes that this action only addresses

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, rather than respond directly to the letters in the proposed action on the petition, the EPA encouraged interested parties to submit relevant comments during the public comment period.

### **III. The EPA's Decision on Connecticut's CAA section 126(b) Petition**

#### *A. Summary of the EPA's Proposed Action*

In section III of the February 22, 2018, proposed action, the EPA explained its proposed basis for denial of Connecticut's CAA section 126(b) petition. Given that ozone is a regional pollutant, the EPA proposed to evaluate the petition consistent with the same four-step regional analytic framework that the EPA has used in previous regulatory actions evaluating regional interstate ozone transport problems. Within this framework, the EPA also proposed to evaluate whether Brunner Island emits or would emit in violation of the good neighbor provision based on both current and future anticipated emission levels. The EPA identified two bases for denial.

First, the EPA noted that the Agency's historical approach to evaluating CAA section 126(b) petitions looks first to see whether a petition, standing alone, identifies or establishes a technical basis for the requested section 126(b) finding. 83 FR 7715. In this regard, the Agency identified several elements of the state's analysis that were considered insufficient to support Connecticut's conclusion. In particular, the EPA proposed to find that the state's analysis of Brunner Island's impact on air quality in Connecticut provides insufficient information regarding

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Connecticut's CAA section 126(b) petition regarding Brunner Island. The EPA has not yet proposed action on the other five petitions.

This document is a prepublication version, signed by EPA Administrator, E. Scott Pruitt on 04/06/2018. We have taken steps to ensure the accuracy of this version, but it is not the official version.

the source's impact on high ozone days and it does not reflect the facility's current operations.

*Id.* Moreover, the EPA proposed to find that the petition does not evaluate the potential costs and air quality benefits that would inform the EPA's evaluation of whether additional emission reductions are cost effective, consistent with the EPA's interpretation of the good neighbor provision. *Id.* at 7718.

Second, the EPA also proposed to rely on its own independent analyses to evaluate the potential basis for the requested CAA section 126(b) finding. *Id.* at 7716. The EPA noted that 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), and primarily burned natural gas with a low NO<sub>x</sub> emission rate in the 2017 ozone season, which indicates that Brunner Island has already implemented the emission reductions requested by Connecticut's petition. *Id.* at 7717. The EPA also explained that it expects the facility to continue operating primarily by burning natural gas in future ozone seasons. *Id.* To support this determination, the EPA relied on its finding that economic factors, including compliance with the CSAPR Update and fuel-market economics, would provide an incentive for Brunner Island to cost-effectively reduce NO<sub>x</sub> emissions. *Id.* at 7718. The EPA therefore proposed to find, based on its own analysis, that there are no additional highly cost-effective controls available at the source, and thus Brunner Island does not currently emit and would not emit in violation of the good neighbor provision with respect to the 2008 ozone NAAQS. *Id.*

The EPA's basis for this final action denying the petition has not fundamentally changed from the proposal. We continue to believe that Connecticut has not demonstrated that Brunner Island 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. Moreover, the EPA's own analysis provides no basis to conclude that the Brunner Island facility either currently emits or would emit pollution in violation of the good neighbor provision for the 2008 ozone NAAQS. In section III of this notice, and in the RTC document included in the docket for this action, the agency explains the rationale supporting its conclusion in light of the public comments.

*B. The EPA's Standard for Reviewing Connecticut's CAA Section 126(b) Petition Regarding the 2008 8-hour Ozone NAAQS*

As discussed in section II.B of this notice, 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 historical approach to evaluating CAA section 126(b) petitions looks first to see whether a petition identifies or establishes a sufficient 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 in the following sections, given the EPA's concerns with the 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 an 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.

With respect to the statutory requirements of 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).<sup>15</sup> Congress provided two separate statutory processes to address interstate transport without indicating any preference for one over the other, suggesting it viewed either approach as a legitimate means to produce the desired result. While either provision may be applied to address interstate transport, 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 to nonattainment and

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<sup>15</sup> 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*, 249 F.3d at 1047.

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*, 249 F. 3d at 1049–50.

Thus, in addressing a section 126(b) petition that addresses ozone transport, the EPA believes it is appropriate to interpret these ambiguous terms consistent with the EPA’s historical approach to evaluating interstate ozone pollution transport under the good neighbor provision. 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. The EPA most recently applied this four-step framework in the promulgation of the CSAPR Update to at least partially address interstate transport with respect to the 2008 ozone NAAQS under CAA section 110(a)(2)(D)(i)(I). Given the specific cross-reference in CAA section 126(b) to the substantive prohibition in CAA section 110(a)(2)(D)(i), 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 highly cost-effective controls achievable at the source(s) named in the CAA section 126(b) petition (i.e., step three).

The EPA notes that Congress did not otherwise specify how the EPA should determine 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) under the terms of section 126(b). Thus, the EPA also believes it is reasonable and appropriate at each step to consider whether the facility “emits or would emit” in light of the facility’s current operating conditions. Therefore, the EPA interprets the phrase “emits or would emit” in this context to mean 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 (i.e., steps one and two), and the source may be further controlled through implementation of highly cost-effective controls (i.e., step 3). Similarly, 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 (i.e., steps one and two) and the source could be further controlled through implementation of highly cost-effective controls (i.e., step 3). Consistent with this interpretation, the EPA has therefore evaluated, in the following section, whether Brunner Island emits or would emit in violation of the good neighbor provision based on both current and future anticipated emission levels.

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 already adopted provisions that eliminate the significant contribution to nonattainment or interference with maintenance of the NAAQS 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 the 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. at 1604 n.18, 1608-09 (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).

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 the EPA has promulgated a 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.

The EPA notes that 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. 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). Thus, in circumstances where a SIP or FIP addressing section 110(a)(2)(D)(i)(I) is being implemented, the EPA will evaluate the section 126(b) petition to determine if it raises new information that merits further consideration.

*C. The EPA's Analysis of 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; *Appalachian Power*, 249 F. 3d at 1049–50.

The EPA has already conducted such an analysis for the 2008 ozone NAAQS with respect to Pennsylvania's impact on receptors in Connecticut in the CSAPR Update. The EPA determined that, based on 2017 modeling projections, statewide emissions from sources in Pennsylvania were 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 threshold of contributing levels equal to or greater than one percent of the 2008 ozone NAAQS to downwind nonattainment and maintenance receptors 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. This further analysis in step three

of the EPA's four-step framework considers cost, technical feasibility and air quality factors to determine whether any emissions deemed to contribute to the downwind air quality problem must be controlled pursuant to the good neighbor provision. Thus, while the EPA's modeling conducted for the CSAPR Update did link statewide emissions from Pennsylvania to nonattainment and maintenance receptors in Connecticut in 2017, this does not conclude the determination, made at step three, as to whether Brunner Island's emissions "contribute significantly" to nonattainment or "interfere with maintenance" of the 2008 ozone NAAQS.

In light of the EPA's conclusions that Pennsylvania emissions are linked to Connecticut's air quality based on the CSAPR Update modeling, the Agency need not take a position regarding whether it is appropriate or consistent with the EPA's historical four-step framework for addressing ozone transport to evaluate the impact of a single source on downwind air quality versus the impact of statewide emissions.<sup>16</sup> Nonetheless, the EPA notes that, for the same reasons that the modeled impact of a state is insufficient to conclude the EPA's analysis, the impact of a single source on downwind air quality would also not necessarily be 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 the EPA could determine that this facility emits or would emit in violation of the good neighbor provision.

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<sup>16</sup> The EPA notes, however, that the D.C. Circuit has affirmed the EPA's decision in a prior section 126(b) action to evaluate the impacts of statewide, rather than source-specific, impacts on downwind ozone nonattainment. *Appalachian Power*, 249 F. 3d at 1049–50. This document is a prepublication version, signed by EPA Administrator, E. Scott Pruitt on 04/06/2018. We have taken steps to ensure the accuracy of this version, but it is not the official version.

The agency also notes that Connecticut's analysis appears to provide insufficient information for the EPA to make a determination under CAA section 126(b) because the conclusions that the petition draws regarding Brunner Island's particular impacts on Connecticut are not sufficiently supported by the state's technical assessment. In particular, existing EPA analyses of interstate ozone pollution transport focus on contributions to high ozone days at the downwind receptor in order to evaluate the impact on nonattainment and maintenance at the receptor. For example, in the CSAPR Update modeling, ozone contributions were calculated using data for the days with the highest future year modeled ozone concentrations.<sup>17</sup> For the 2008 ozone NAAQS, only the highest measured ozone days from each year are considered for the calculation of ozone design values<sup>18</sup> (the values that determine whether there is a measured NAAQS violation). Therefore, measured ozone values that are far below the level of the NAAQS do not cause an exceedance or violation of the NAAQS. For this reason, only ozone contributions to days that are among the highest modeled ozone days at the receptor are relevant to determining if a state or source is linked to downwind nonattainment or maintenance issues. 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 whether the modeled and/or measured ozone levels in Connecticut on the days when emissions from Brunner Island have the largest impact at Connecticut receptors are among the highest modeled ozone days at

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<sup>17</sup> Air Quality Modeling Technical Support Document for the Final Cross-State Air Pollution Rule Update, 17 (August 2016). Available at [https://www.epa.gov/sites/production/files/2017-05/documents/aq\\_modeling\\_tsd\\_final\\_csapr\\_update.pdf](https://www.epa.gov/sites/production/files/2017-05/documents/aq_modeling_tsd_final_csapr_update.pdf).

<sup>18</sup> Ozone design values are calculated as the three-year average of the annual fourth-highest daily maximum 8-hour average measured ozone concentration at each monitor. *See* 80 FR 65296 (October 26, 2015) for a detailed explanation of the calculation of the 3-year 8-hour average and 40 CFR part 50, appendix U.

those receptors. Thus, the petition does not provide sufficient information to evaluate the contribution of Brunner Island's emissions to nonattainment and maintenance receptors in Connecticut.<sup>19</sup>

We also note that the petition's evaluation of Brunner Island's impact on Connecticut relied on emission data from 2011 which, as discussed in more detail in the following paragraphs, is not likely to be representative of current and/or future NO<sub>x</sub> emissions and ozone levels in Connecticut, Pennsylvania, and the rest of the region.<sup>20</sup> Therefore, the modeled impacts identified in the petition are likely also not representative of the impacts of Brunner Island's current emission levels on ozone concentrations in Connecticut.

With respect to the question of whether there are feasible and highly cost-effective NO<sub>x</sub> emission reductions available at Brunner Island (step three of the four step framework), Brunner Island primarily burned natural gas with a low NO<sub>x</sub> 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, and as described in more detail in the following paragraphs, the EPA does not find at this time that there are additional feasible and highly cost-effective NO<sub>x</sub> emission reductions available at Brunner Island. The EPA therefore has no basis to determine,

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<sup>19</sup> 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, but the table does not indicate whether those days were high measured and/or modeled ozone days.

<sup>20</sup> The Connecticut petition relies on air quality modeling that uses 2011 emission 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<sub>x</sub> ozone season emissions were 79 percent below 2011 levels. Brunner Island is located in Pennsylvania, which as a facility reduced its ozone season NO<sub>x</sub> emissions by 88 percent in 2017 relative to 2011 levels. These data are publicly available at <https://www.epa.gov/ampd>.

consistent with the standard of review outlined in section III.B, that Brunner Island 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 NO<sub>x</sub> emissions declined from 3,765 tons in 2016 to 877 tons in 2017, and the facility's ozone season NO<sub>x</sub> 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<sub>x</sub> emissions. Accordingly, the EPA has determined that 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.

Similarly, the EPA concludes that Connecticut's petition does not demonstrate that Brunner Island would emit in violation of the good neighbor provision. The EPA also believes that Brunner Island will continue to primarily use natural gas as fuel during future ozone seasons for several economic reasons. First, compliance with the CSAPR Update provides an economic incentive to cost-effectively reduce NO<sub>x</sub> emissions. Specifically, Brunner Island's participation in the CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance trading program provides an economic incentive to produce electricity in ways that lower ozone-season NO<sub>x</sub>, such as by burning natural gas relative to burning coal at this particular power plant. Under the CSAPR Update, each ton of NO<sub>x</sub> emitted by a covered EGU has an economic value—either 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 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.<sup>21</sup> This reduction in NO<sub>x</sub> 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 continue to 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 Henry Hub natural gas spot prices ranged from \$2.52/mmBtu to \$4.37/mmBtu (i.e., between 2009 and 2016).<sup>22</sup> 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

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<sup>21</sup> This estimated emissions difference was calculated as the difference between 2017 reported NO<sub>x</sub> emissions of 877 tons and a counterfactual 2017 NO<sub>x</sub> emissions estimate of 3,591 tons created using 2017 operations (i.e., heat input of 19,406,872 mmBtu) multiplied by the 2016 NO<sub>x</sub> emission rate of 0.37 lb/mmBtu reflecting coal-fired generation. These data are publicly available at <https://www.epa.gov/ampd>.

<sup>22</sup> Henry Hub is a significant distribution hub located on the natural gas pipeline system located in Louisiana. Due to the significant volume of trades at this location, it is seen as the primary benchmark for the North American natural gas market. These data are publicly available at <https://www.eia.gov/dnav/ng/hist/rngwhhdA.htm>.



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 price range exhibited from 2009 to 2016 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 \$3.83/mmBtu in 2023.<sup>23</sup> 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.<sup>24</sup> 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. The EPA further notes that recent analyses projecting emission levels to a future year indicate that no air quality monitors in Connecticut are projected to have nonattainment or maintenance problems with respect to the 2008 ozone NAAQS by 2023.<sup>25</sup> While this modeling is not necessarily determinative of whether Brunner Island emits or would

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<sup>23</sup> 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>. Projected delivered natural gas prices for the electric power sector in the Middle Atlantic region, where Brunner Island is located, ranged between \$3.56 in 2018 and \$4.08/mmBtu in 2023. The projected delivered coal prices for the electric power sector in the Middle Atlantic region remain relatively constant, ranging from \$2.51 to \$2.56/mmBtu. These data are publicly available at <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>.

<sup>24</sup> AEO short-term energy outlook available at <https://www.eia.gov/outlooks/steo/report/natgas.php>.

<sup>25</sup> 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.

emit in violation of the good neighbor provision, it does suggest that, by 2023, air quality in Connecticut may be significantly improved compared to present monitored values and it may no longer be necessary to further reduce emissions from any state to ensure attainment of the 2008 ozone NAAQS in Connecticut.<sup>26</sup>

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.<sup>27</sup> This overall increase results from both an increase in capacity from the construction of additional units and an increased gas-fired utilization capacity factor. The available capacity increased six percent while average capacity factor increased from 23 percent to 25 percent, which reflects an eight percent increase in utilization.

Considering the projected continued broader downward trends in NO<sub>x</sub> emissions resulting in improved air quality in Connecticut, the EPA anticipates that Brunner Island will likely continue to primarily burn natural gas during the ozone season as air quality in

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<sup>26</sup> The EPA also notes that a proposed settlement agreement between Sierra Club and Talen Energy may further ensure that Brunner Island will operate by burning gas in the ozone season in 2023 and future years. Under the settlement, Brunner Island agrees to operate only on natural gas during the ozone season (May 1-September 30) starting on January 1, 2023, (subjected to limited exceptions) and cease coal operations after December 31, 2028. See a joint statement regarding this agreement, available at <http://talenenergy.investorroom.com/2018-02-14-Joint-Statement-Talen-Energy-and-the-Sierra-Club-Reach-Agreement-on-the-Future-Operation-of-the-Brunner-Island-Power-Plant>. As of the date of this final action, that settlement agreement has not yet been finalized.

<sup>27</sup> From 8.4 billion mmBtu to 9.6 billion mmBtu. See EPA's Clean Air Markets Division data available at <https://ampd.epa.gov/ampd/>.

Connecticut continues to improve. Accordingly, the EPA has no basis to conclude that the facility would emit in violation of the good neighbor provision with respect to the 2008 ozone NAAQS.

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<sub>x</sub> allowance trading program will incentivize Brunner Island to increase its emissions. As an initial matter, Connecticut fails to support its contention that the CSAPR Update does not incentivize sources to reduce emissions and thus does not meet the demonstration burden imposed on petitioners under CAA section 126(b). Moreover, Brunner Island's 2017 emission levels demonstrate that, contrary to Connecticut's assertions, Brunner Island reduced emissions while operating under the economic incentives of the CSAPR Update allowance trading program. This is also true for EGUs in Pennsylvania more broadly, which had collective NO<sub>x</sub> emissions of 13,646 tons, well below the Pennsylvania NO<sub>x</sub> emissions budget of 17,952 tons. The petition also fails to support its contention that Brunner Island's participation in the allowance trading program will result in increased emissions on days with either the highest ozone levels or days with high electricity demand. Throughout the 2017 ozone season, Brunner Island's hourly NO<sub>x</sub> rate averaged 0.09 lb/mmBtu and was higher than 0.30 lb/mmBtu in only 16 hours, or 0.4% of the time.<sup>28</sup> Based on historical emission rate data for Brunner Island before the completion of the natural gas pipeline, a rate above 0.30 lb/mmBtu indicates the facility is predominately burning coal (e.g., their average ozone-season NO<sub>x</sub> emission rate in 2016 was 0.37 lb/mmBtu). Conversely, based on historical emission rate data for Brunner Island after the completion of the natural gas pipeline, a rate below 0.15 indicates the facility is predominately burning natural gas (e.g., their average

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<sup>28</sup> See Brunner Island 2017 Hourly Emissions Spreadsheet, available in the docket for this action. This document is a prepublication version, signed by EPA Administrator, E. Scott Pruitt on 04/06/2018. We have taken steps to ensure the accuracy of this version, but it is not the official version.

ozone-season emission rate in 2017 was 0.10 lb/mmBtu). During the highest 10 percent of ozone season electricity demand hours based on total hourly gross generation reported to EPA for the region around Pennsylvania (Connecticut, Delaware, Maryland, Pennsylvania, New Jersey and New York), Brunner Island's average emission rate was just below 0.10 lb/mmBtu and was higher than 0.15 lb/mmBtu in only 28 of the 367 hours, or 7.6% of those hours. Brunner Island's emissions were never above 0.30 lb/mmBtu during these hours. Thus, based on 2017 ozone season operations, EPA finds no evidence to suggest that Brunner Island's participation in the allowance trading program would incentivize Brunner Island to increase its emissions generally or result in increased emissions on days with high electricity demand.

Finally, to the extent that Connecticut identifies other control strategies that could potentially be implemented at Brunner Island in order to reduce NO<sub>x</sub> 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 and it does not demonstrate that such controls are highly cost-effective considering potential emission reductions or 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<sub>x</sub> reduced. The EPA's analysis showed that additional NO<sub>x</sub> reductions at EGUs, including installation of new SCRs and SNCRs at EGUs that lacked post-combustion controls, would be more expensive.<sup>29</sup> The cost of such new post-combustion controls at Brunner Island would likely be even more expensive considering current and anticipated emission rates.

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<sup>29</sup> See EGU NO<sub>x</sub> Mitigation Strategies Final Rule Technical Support Document available at <https://www.regulations.gov>, Docket ID No. EPA-HQ-OAR-2015-0500-0554.

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Under the EPA's approach to quantifying those amounts of emissions that significantly contribute to nonattainment or interfere with maintenance in the CSAPR Update, the cost to implement a particular control strategy is balanced against air quality factors, such as the amount of NO<sub>x</sub> emission reductions available using the 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 NO<sub>x</sub> emission reductions or improvements in ozone concentrations would accrue from these additional control strategies and thus has not demonstrated that the additional costs associated with these controls would be justified by the air quality considerations.<sup>30</sup> This element is not only key to the EPA's interpretation of the good neighbor provision as it applies step three to ozone pollution transport, but is also 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. Thus, the petition does not demonstrate that potential emission reductions achievable at Brunner Island through installation of such controls would necessarily constitute the state's good neighbor obligation with respect to the 2008 ozone NAAQS.

Based on the information discussed in this notice, the EPA is denying Connecticut's section 126(b) petition on two bases. First, the EPA has identified a number of reasons noted in this section as to why Connecticut has not met its burden to demonstrate that Brunner Island emits or would emit in violation of the good neighbor provision with respect to the 2008 ozone NAAQS. Second, the EPA finds, based on its own analysis, that Brunner Island combusted

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<sup>30</sup> Although Brunner Island has already reduced emissions via installation and operation of the natural gas pipeline, the EPA notes that Connecticut's petition also did not evaluate either the costs or anticipated air quality benefits of this control strategy, and thus did not demonstrate that emission reductions achieved through the operation of natural gas are necessarily required under the good neighbor provision with respect to the 2008 ozone NAAQS.

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primarily natural gas in the 2017 ozone season, resulting in a low NO<sub>x</sub> emission rate for this facility, and it is expected that future operation will be consistent with 2017 operations. In light of this determination, the EPA finds that there are no additional highly cost-effective controls available at the source, and thus there is no basis at this time for the EPA to find that Brunner Island emits or would emit in violation of the good neighbor provision with respect to the 2008 ozone NAAQS.<sup>31</sup>

*D. Public comments*

The EPA solicited comment on the proposed denial of Connecticut's section 126(b) petition. This section addresses significant comments received on the February 22, 2018 proposed denial. Remaining comments are addressed in a separate RTC document found in the docket for this action.

Several commenters asserted that the EPA should base its decision to grant or deny Connecticut's section 126(b) petition on the technical support included in the petition. The commenters contend that the petition was based on the most recent data available when the petition was submitted and allege that the proposed denial fails to meaningfully engage with the data and evidence provided in the petition.

The commenters are incorrect in asserting that the EPA must base its decision to grant or deny a petition based only on the technical support included in the petition. Were the EPA to act

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<sup>31</sup> 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.

solely on the information available in the petition, that information may result in an arbitrary and unreasonable decision by the EPA, and could, for example, impose controls or emission limitations that are not appropriately tailored to the problem as it exists at the time of EPA's final action or at the time when such controls or limitations would actually be implemented. This could result in unnecessary over-control (or under-control) of emissions, in potential violation of the Supreme Court's holding in *EPA v. EME Homer City Generation, L.P.*, 134 S. Ct. 1584, 1608-09 (2014). Therefore, the EPA does not agree that it would be appropriate to solely rely on the information in the petition to evaluate Brunner Island's impact on Connecticut in light of the recent operational changes at the facility.

Moreover, as discussed in section III.B of the notice of final action, 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. In this instance, Brunner Island's recent installation of a natural gas connection pipeline allowing natural gas to be combusted to serve Brunner Island's electric generators, which has significantly reduced the facility's NO<sub>x</sub> emissions, resulted in changed circumstances at the facility such that the 2011 emissions analyzed in the petition are not an accurate indicator of Brunner Island's future ozone seasons emissions. To inform its rationale, the EPA examined emissions from the 2017 ozone season and expected future emission levels, which reflect the recent changes at Brunner Island.

Although the EPA determined that it was appropriate to conduct an independent analysis to determine whether it should grant or deny the petition, the commenter is incorrect in asserting that the EPA failed to meaningfully engage with the data and evidence provided in the petition. As described in section III.B, the petitioner bears the burden of establishing, as an initial matter, a technical basis for the specific finding requested. The EPA evaluated the information provided

by the petitioner, and found that there was insufficient support for the EPA to grant the petition on its face. For example, the EPA examined the relevance of the 2011 emissions data provided in the petition, finding that the state's analysis no longer reflects the facility's current operations due to changed conditions at Brunner Island. The EPA also noted the lack of information regarding ozone impacts on high ozone days at specific downwind receptors in Connecticut and the state's failure to evaluate costs or air quality benefits of proposed control measures. Thus, the EPA did evaluate the data and evidence provided in the petition and found it lacking.

Several commenters asserted that while Brunner Island has installed the capability to use natural gas as fuel, the facility can switch back to coal at any time and increase its NO<sub>x</sub> emissions. These commenters contend that the EPA must therefore place a federally enforceable requirement on Brunner Island pursuant to section 126 to ensure the facility continues to operate on natural gas. The commenters suggest that the use of the term "prohibit" in section 110(a)(2)(D)(i)(I) means that the EPA must include a legally enforceable emission limit requiring Brunner Island to operate with gas for electricity generation.

The commenters assertion that the EPA's expectations regarding Brunner Island's future operations do not satisfy the strict emission prohibition of CAA section 110(a)(2)(D)(i)(I) implicitly assumes that Brunner Island is in fact operating in violation of section 110(a)(2)(D)(i)(I). The EPA agrees with the commenter that the prohibition of section 110(a)(2)(D)(i)(I) is linked directly to section 126(b), 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 to nonattainment and interference with maintenance should be construed identically for purposes of both provisions where EPA has already given meaning to the terms under one provision. 83 FR 7711 through 7722; *see also Appalachian*



*Power Co. v. EPA*, 249 F.3d 1032, 1048-50 (D.C. Cir. 2001) (affirming as reasonable the EPA’s approach to interpreting a violation of section 110(a)(2)(D)(i)(I) under section 126 consistent with its approach in the NO<sub>x</sub> SIP Call).

Given the inextricable link between the substantive requirements of the two provisions, the EPA applied the same four-step framework used in previous ozone transport rulemakings, including the CSAPR Update, to evaluate whether Brunner Island significantly contributes to nonattainment or interferes with maintenance of the 2008 ozone NAAQS in Connecticut. Pursuant to this framework, the EPA first determines at steps one and two whether emissions from an upwind state impact downwind air quality problems at a level that exceeds an air quality threshold, such that the state is linked and therefore contributes to the air quality problem. At step three, the EPA then determines whether the contribution is “significant” or interferes with maintenance of the NAAQS based on several factors, including the availability of cost-effective emission reductions at sources within the state. Where the EPA determines that sources in a state do not have cost-effective emission reductions available, the EPA concludes that the state does not significantly contribute to nonattainment or interfere with maintenance of the NAAQS, and thus, that there are no emissions at the source that must be “prohibited” under section 110(a)(2)(D)(i)(I).

As described in section III.C, the EPA adopted the same framework with respect to Connecticut’s section 126(b) petition by evaluating the linkage between Pennsylvania and Connecticut, and the availability of emission reductions at Brunner Island. The EPA determined that while emissions from the state of Pennsylvania are impacting Connecticut under steps one and two of the framework, Brunner Island does not emit and would not emit in violation of this provision because there are no further cost-effective emission reductions available at the source

under step three of the framework. The EPA's application of the same framework that the agency has used to evaluate impacts under section 110(a)(2)(D)(i)(I) to the evaluation of Brunner Island's impacts on Connecticut under section 126(b) is therefore consistent with the commenters' suggestion that the two statutory provisions are directly linked.

Importantly, the EPA only implements federally enforceable limits under step four of the four-step framework for sources that the EPA determines have emissions that significantly contribute to nonattainment or interfere with maintenance of the ozone NAAQS downwind under steps one, two, and three. *See* 81 FR 74553 (declining to impose CSAPR Update FIP obligations for EGUs in District of Columbia and Delaware despite linkages to downwind receptors where EPA determined no cost-effective emission reductions were available). This is consistent with the statutory language of section 110(a)(2)(D)(i)(I), which "prohibit[s]" only those emissions that significantly contribute to nonattainment or interfere with maintenance of the NAAQS in another state. The EPA has reasonably interpreted this to mean that where there is no such impact, the EPA and the states are not required to impose emission limitations.<sup>32</sup> The EPA does not dispute that, were it to find that Brunner Island emits or would emit in violation of the prohibition under section 110(a)(2)(D)(i)(I), an appropriate remedy to mitigate the emission impacts would necessarily have to be federally enforceable, both under section 126(c) (requiring compliance by

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<sup>32</sup> This is also consistent with designation requirements elsewhere in title I. Downwind areas are initially designated attainment or nonattainment for the ozone NAAQS based on actual measured ozone concentrations, regardless of whether the level of ozone concentrations is due to enforceable emission limits. Similarly, the EPA generally evaluates whether sources in nearby areas contribute to measured nonattainment in such areas for purposes of designations based on actual emission levels, and thus sources in those nearby areas are generally subject to nonattainment planning requirements only if actual emissions from that area are considered to contribute to the air quality problem. Here, where "significant contribution" is necessarily a higher standard than the contribution threshold used in designations, it is reasonable and consistent to determine that states or EPA need only impose emission limitations if it is determined that there is significant contribution or interference with maintenance.

a source with EPA-imposed emission limitations and compliance schedules) and section 110(a)(2)(D)(ii) (requiring a state implementation plan to contain provisions ensuring compliance with the requirements of section 126). Because the EPA has determined that there are no further cost-effective emission reductions available at Brunner Island at step three, the EPA does not reach step four's requirement to impose federally enforceable emission reductions.

Several commenters challenge the EPA's determination that Brunner Island will primarily operate on natural gas in future ozone seasons as "speculative" and "conjecture." These commenters suggest that factors such as natural gas prices could change in the future that would make it more economic to burn coal and buy allowances in the CSAPR Update regional trading program. Thus, the commenters contend that the EPA cannot rely on Brunner Island's recent ozone season operation on gas to determine that there are no further cost-effective emission reductions available at the source. The commenters also suggest that a proposed settlement agreement between Sierra Club and Talen Energy indicates Brunner Island's intention to continue firing significant amounts of coal between now and 2023, when the first emission limitations would take effect requiring Brunner Island to operate on gas during the ozone season.

As discussed in section III.C, the EPA has ample evidence to expect that Brunner Island will continue operating primarily by burning natural gas in future ozone seasons. The EPA does not claim, as the commenter suggests, that one year of changed operations provides assurances of Brunner Island's future activity. Brunner Island's recent installation of a natural gas pipeline and subsequent use of natural gas as fuel is not the only piece of evidence indicating that Brunner Island will likely burn primarily natural gas in future ozone seasons. Rather, as described in this notice and in the RTC, the EPA has also relied on its finding that economic factors, including compliance with the CSAPR Update and fuel-market economics, would provide an incentive for

Brunner Island to combust primarily natural gas. Thus, the EPA's analysis of Brunner Island's anticipated future operations is based on reasonable and rigorous assessments of the best data available regarding the electricity generating markets, rather than speculation.

The EPA does not believe the fluctuating nature of market forces asserted by the commenter outweighs the EPA's analysis of market trends, forces, and likely behaviors. The commenters themselves speculate, without analysis or evidence, that market forces may be such in the future that Brunner Island would likely not use primarily natural gas. The EPA also does not believe it is appropriate to speculate on the underlying motivations behind the proposed settlement agreement between Talen Energy and Sierra Club, or what such motivations might mean for operation during years not covered by the agreement. Rather, the EPA's analysis is based on economic incentives and market conditions, which support that Brunner Island will primarily combust natural gas, consistent with trends in the electric generating industry. The commenter has not provided any information challenging this analysis, and merely speculates on potentially fluctuating market forces and potential motivations behind Brunner Island's agreements. This speculation does not outweigh the EPA's reasoned evidence-based analysis of Brunner Island's likely behavior during the ozone season. Thus, without specific evidence or analysis to the contrary, the EPA has no reason to believe that the evidence provided in either the proposed or final action is inaccurate. The EPA notes that if in fact Brunner Island's operations change such that the facility is operating primarily on coal during future ozone seasons and future emission levels increase significantly, then today's final action denying Connecticut's section 126 petition would not preclude the State from submitting another petition regarding Brunner Island's impacts. The EPA is not, however, pre-determining what action may be

appropriate on any such future petition, which would depend upon a variety of factors, including the level of emissions at Brunner Island and future ozone concentrations in Connecticut.

#### **IV. Final Action to Deny Connecticut's Section 126(b) Petition**

Based on the considerations outlined at proposal, after considering all comments, and for the reasons described in this notice, the EPA is denying the Connecticut's section 126(b) petition regarding the Brunner Island facility in York County, Pennsylvania. The EPA finds that Connecticut has not met its burden to demonstrate that Brunner Island emits or would emit in violation of the good neighbor provision with respect to the 2008 ozone NAAQS. The EPA also finds, based on its own analysis, that there are no additional highly cost-effective controls available at the source and thus no basis at this time to determine that Brunner Island emits or would emit in violation of the good neighbor provision with respect to the 2008 ozone NAAQS.

#### **V. Judicial Review**

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate regional circuit **[INSERT DATE 60 DAYS FROM DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. *See* CAA section 307(b)(2).

**Page 46 of 46 - Response to June 1, 2016 Clean Air Act Section 126(b) Petition from Connecticut**

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Dated:

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E. Scott Pruitt,  
Administrator.