6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-HQ-OAR-2018-0170; FRL-___-OAR]

RIN 2060-AU04

Response to Clean Air Act Section 126(b) Petition from New York

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of Final Action on Petition.

SUMMARY: The Environmental Protection Agency (EPA) is denying a Clean Air Act (CAA or Act) petition submitted by the state of New York on March 12, 2018. The petition requested that the EPA make a finding that emissions from a group of hundreds of identified sources in nine states (Illinois, Indiana, Kentucky, Maryland, Michigan, Ohio, Pennsylvania, Virginia and West Virginia) significantly contribute to nonattainment and interfere with maintenance of the 2008 and 2015 ozone national ambient air quality standards (NAAQS) in Chautauqua County and the New York Metropolitan Area (NYMA) in violation of the good neighbor provision. The EPA is denying the petition because the petitioner, New York, has not demonstrated, and the EPA did not independently find, that the group of identified sources emits or would emit in violation of

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the good neighbor provision for the 2008 or 2015 ozone NAAQS in Chautauqua County and the

NYMA.

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-2018-0170. All documents in the docket are listed and publicly available at

http://www.regulations.gov. Publicly available docket materials are also available in hard copy at

the Air and Radiation Docket and Information Center, EPA/DC, EPA William Jefferson Clinton

West Building, Room 3334, 1301 Constitution Avenue, NW, Washington, D.C. 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 Air and Radiation Docket and Information Center is (202) 566-1742.

For additional information about the EPA's public docket, visit the EPA Docket Center

homepage at: *http://www.epa.gov/epahome/dockets.htm*.

FOR FURTHER INFORMATION CONTACT: Please direct questions concerning this final action to Beth W. Palma, U.S. EPA, Office of Air Quality Planning and Standards, Air Quality Policy Division, Mail Code C539-04, Research Triangle Park, NC 27711, telephone (919) 541–5432, email at *palma.elizabeth@epa.gov*.

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I. General Information

A. Executive Summary of the EPA's Decision on the CAA Section 126(b) Petition from New

York

In March 2018, the state of New York submitted a petition requesting that the EPA make

a finding pursuant to CAA section 126(b) that emissions from approximately 350 facilities in

nine states significantly contribute to nonattainment and/or interfere with maintenance of the Page 3 of 171

2008 and 2015 ozone NAAQS in violation of CAA section 110(a)(2)(D)(i)(I), otherwise known as the good neighbor provision. On May 6, 2019, the EPA issued a proposal to deny the CAA section 126(b) petition from New York. 84 FR 22787 (May 20, 2019). The Agency solicited comments on the proposal and hosted a public hearing on June 11, 2019, during which four speakers testified. The EPA also received 44 written comments submitted to the docket on the proposed denial. This *Federal Register* notice addresses certain significant comments the Agency received. The EPA addressed the remaining comments in the separate Response to Comments (RTC) document available in the docket for this action.

As described in further detail in this notice, the EPA is finalizing the denial of the CAA section 126(b) petition submitted by the state of New York. Generally, the New York petition (and comments supportive of the EPA granting this petition) suggests that residents of New York are exposed to unhealthy levels of ground-level ozone pollution. The petition identifies approximately 350 electric generating unit (EGU) facilities and non-EGU facilities emitting, or projected to emit, 400 tons per year or more of nitrogen oxides (NO_X) in nine upwind states and requests that the EPA establish permanent and enforceable emissions limitations for the named major NO_X sources at levels designed to prevent them from significantly contributing to nonattainment or interfering with maintenance of the 2008 and 2015 ozone NAAQS in New

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York State. In crafting this final action, the EPA has considered public comments on its May 6, 2019, proposal to deny this petition.

Consistent with the EPA's proposal and based on the best data and information available to the Agency at this time, the Agency is finalizing its denial of this petition. This denial is based on New York's failure to meet its statutory burden to demonstrate that the group of sources identified in the petition emits or would emit in violation of the good neighbor provision for the 2008 or 2015 ozone NAAQS with respect to either Chautauqua County or the New York-Northern New Jersey-Long Island, New York-New Jersey-Connecticut area (hereafter, the New York metropolitan area or NYMA).

As indicated in the EPA's proposal, the EPA evaluated New York's CAA section 126(b) petition consistent with the same four-step interstate transport framework that the EPA has used in previous regulatory actions addressing regional ozone transport problems. The EPA's denial rests on both the first and third steps of this framework. With respect to the 2008 and 2015 ozone NAAQS in Chautauqua County, the EPA is denying the petition at step 1 of the framework (*i.e.*, whether there will be a downwind air quality problem relative to the relevant NAAQS) based on the conclusion that the petition does not provide sufficient information to indicate that Chautauqua County should be considered a nonattainment or maintenance receptor pursuant to the good neighbor provision. With respect to the 2008 ozone NAAQS in the NYMA, the EPA is

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also denying the petition at step 1 of the framework based on the conclusion that the petition does not provide sufficient information to indicate that the NYMA should be considered a nonattainment or maintenance receptor pursuant to the good neighbor provision. Furthermore, the EPA's own independent analysis of available information indicates that there is not currently, nor is there projected to be in 2023, an air quality problem with respect to either NAAQS in Chautauqua County, and that in 2023 there is not projected to be any further air quality problem with respect to the 2008 ozone NAAQS in the NYMA.¹ Thus, for these areas and NAAQS, the EPA has found that the petition has not met its burden at step 1 of the four-step interstate transport framework to demonstrate that the group of identified sources either emits or would

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¹ The EPA notes that on September 13, 2019, the D.C. Circuit issued an opinion remanding the Cross State Air Pollution Rule Update (CSAPR Update, 81 FR 74504 (October 26, 2016)) in *Wisconsin v. EPA*, No. 16-1406. The court held that the rule is inconsistent with the CAA because it does not fully address upwind states' obligations under the good neighbor provision by the relevant attainment date for downwind areas. Nonetheless, the EPA is subject to a court-ordered deadline to take final action on New York's CAA section 126(b) petition by September 20, 2019. As explained in this notice, the EPA is finalizing its denial of New York's CAA section 126(b) petition, in part, because the petitioner did not meet its burden to demonstrate both that there is a relevant downwind air quality under the good neighbor provision in a relevant future year in either Chautauqua County or the NYMA, and that there are cost-effective emissions reductions available at the named sources. This basis for denial based on Petitioner's failure to meet its burden is independent and severable from any portion of the denial based on the EPA's discretionary evaluation of downwind air quality in New York using the Agency's 2023 modeling data. The EPA may make any necessary or appropriate modifications to this final action subsequently to reflect its understanding of the court's holding in *Wisconsin*.

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emit pollution in violation of the good neighbor provision. With respect to the 2015 ozone NAAQS in the NYMA, the Agency's 2023 modeling shows a relevant downwind air quality problem, and, thus, the EPA is not denying this portion of the petition with respect to step 1.

The EPA is additionally denying the petition as to all areas for the 2008 and 2015 NAAQS at step 3 of the framework (*i.e.*, whether, considering cost and air quality factors, emissions from sources in the named state(s) will significantly contribute to nonattainment or interfere with maintenance of a NAAQS at a receptor in another state). The EPA has found that material elements in the petition's assessment of whether the sources may be further controlled through implementation of cost-effective controls are insufficient and, thus, New York did not meet its step 3 burden to demonstrate that the named sources currently emit or would emit in violation of the good neighbor provision with respect to the relevant ozone NAAQS.²

In making this final decision, the EPA reviewed the petition from New York, the public comments received, the relevant statutory authorities and other relevant materials. Accordingly, the EPA denies the CAA section 126(b) petition from New York.

² The EPA solicited comment on whether to also deny the petition because the petitioner did not sufficiently justify that its identification of such a large, undifferentiated number of sources located in numerous upwind states constitutes a "group of stationary sources" within the context of CAA section 126(b). Based on the other bases for denial, the EPA does not need to reach the question of whether the petitioners' failed to sufficiently justify its interpretation of a "group of stationary sources" but notes that the absence of supporting information for such a determination makes the Agency unlikely to side with petitioners on the information provided. Page 7 of 171

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The remainder of this notice is organized as follows: The General Information part of this notice (Section I) continues with a summary of the relevant issues raised in New York's CAA section 126(b) petition and a summary of the EPA's May 6, 2019, proposed action. Section II of this notice provides background material and information regarding the EPA's approach to addressing the interstate transport of ozone under CAA sections 110(a)(2)(D)(i)(I) and 126(b). Section III of this notice discusses the EPA's standard of review for this action and details the bases for the EPA's final action to deny this petition, including responses to significant comments received on the proposal.

B. The CAA Section 126(b) Petition from New York

On March 12, 2018, the state of New York, through the New York State Department of Environmental Conservation (NY DEC), submitted a CAA section 126(b) petition alleging that emissions from a group of specified upwind sources in Illinois, Indiana, Kentucky, Maryland, Michigan, Ohio, Pennsylvania, Virginia and West Virginia significantly contribute to nonattainment and interfere with maintenance of the 2008 and 2015 ozone NAAQS in the NYMA and in Chautauqua County in western New York.

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The petition contends that, although the Chautauqua County area (*i.e.*, the area in and around Jamestown, New York) was at the time of petition submittal (and is currently) attaining both the 2008 and the 2015 ozone NAAQS, the area may have difficulty maintaining its attainment status in the future. The petition also explains that the NYMA is currently designated nonattainment for the 2008 ozone NAAQS and, at the time New York submitted the petition, the area would likely be designated nonattainment for the 2015 ozone NAAQS and, at the time New York submitted the petition further asserts that all three states in the multistate NYMA (*i.e.*, New York, New Jersey and Connecticut) have surpassed their three-percent-per-year emissions reductions requirements for the 2008 NAAQS; yet certified monitoring data through 2016 and (at the time of the petition submittal) preliminary 2017 data indicate that the area is not attaining the 2008 NAAQS, with one monitor in Connecticut recording a preliminary 2017 design value of 83 parts per billion (ppb).

The New York petition alleges that emissions from numerous, named upwind sources significantly contribute to nonattainment and interfere with maintenance of the 2008 and 2015 8-hour ozone NAAQS in New York based on two arguments. First, the petition alleges that the

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³ The EPA had not yet issued final designations at the time the petition was submitted. On April 30, 2018, the EPA designated New York-Northern New Jersey-Long Island, NY-NJ-CT area (NYMA) as a Moderate nonattainment area for the 2015 ozone NAAQS. 83 FR 25776 (June 4, 2018).

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EPA's 2017 contribution modeling conducted in support of the EPA's Cross-State Air Pollution Rule (CSAPR) Update⁴ shows that the nine states in which these sources are located contribute 1 percent or more of the 2008 8-hour ozone NAAQS (or 0.75 ppb or more) to ozone concentrations in New York. Second, the petition describes a study that allegedly found that air transported into Chautauqua County on the worst air quality days results in maximum daily ozone concentrations that, on average, are within 2 ppb of the 2015 ozone NAAQS and often exceed the standard of 70 ppb.⁵

When identifying what constitutes significant ozone contributions, the petition considers the highest emitting facilities (*i.e.*, EGU and non-EGU facilities emitting, or projected to emit, 400 tons per year or more of NO_x) from the named states and asserts that these facilities are expected to have the greatest impact on the ability of the NYMA and Chautauqua County to

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⁴ 81 FR 74504 (October 26, 2016).

⁵ The petition discusses the results of a study titled the "Dunkirk Monitor Transport Study," which presents an analysis of back-trajectories used to single out interstate airflow on "design days," which the petition defines as days considered in the calculation of the design values. The subject days include the 4 days in each year from 2013 to 2017 with the largest daily maximum 8-hour ozone concentrations at the Dunkirk monitoring site in Chautauqua County, New York. The Dunkirk monitoring site is the design value monitoring site in Chautauqua County (*i.e.*, the site with the highest design value in the county).

attain and maintain the 2008 and 2015 NAAQS.⁶ The petition uses NY DEC generated air

quality modeling data to show single-day, 8-hour average impacts from the group of 400 ton-per-

year sources identified in any individual state of up to 6.34 ppb in Chautauqua County and 4.97

ppb in the New York portion of the NYMA nonattainment area.⁷ The petition asserts that

instances in which the maximum impact from an individual state's total combined 400 ton-per-

year sources exceeds 0.75 ppb at a particular monitor indicate significant contribution to

nonattainment or interference with maintenance of the 2008 ozone NAAQS. The petition further

asserts that impacts above 0.70 ppb indicate significant contribution to nonattainment or

interference with maintenance of the 2015 ozone NAAQS. NY DEC used its own independent

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⁶ The petition identifies which facilities emit 400 tons per year of more of NO_X based on 2017 EGU projections by the Mid-Atlantic Regional Air Management Association. The petition also identifies non-EGU sources emitting greater than 400 tons of NO_X in the 2014 National Emissions Inventory.

⁷ The petition provides additional detail regarding the modeling methodology. Specifically, the petition notes that NY DEC used version 5.0.2 of the Community Multiscale Air Quality model with the EPA's Weather Research Forecast (WRF) 2011 meteorological data to model hourly ozone concentrations during the period May 18 to July 30 for a 2017 "baseline" scenario and additional state-by-state "control" modeling scenarios in which emissions from the named sources in a given state were set to zero. The petition explains that NY DEC then used the modeled concentrations to calculate the 8-hour daily maximum average (MDA8) in each grid cell on each day of the modeling period for each modeled scenario. The difference in MDA8 concentrations between the 2017 baseline and each state zero-out run was used to represent the contributions on each day. The NY DEC then selected the largest single-day contribution from among the highest ozone concentration days to support their analysis of contributions relative to a 1-percent-of-the-NAAQS threshold.

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modeling to support the assertions in their CAA section 126(b) petition because the state "has significant concerns" about the assumptions and results of the EPA's recently released 2023 air quality modeling and its applicability to the CAA section 126(b) petition process.⁸ The petition takes particular issue with the EPA's expectation that uncontrolled EGUs will greatly reduce their emissions rates in the absence of unit-level enforceable limits and expresses the additional concern that the EPA may have underestimated the ozone concentration results for monitoring sites located near significant water bodies based on the treatment of model cells containing a land/water interface. The petition also asserts that modeling of 2023 is insufficient to support good neighbor state implementation plans (SIPs) and cannot be used to support a review of New York's petition because CAA section 126(c) explicitly states that compliance must be met "in no case later than three years after the date of [a CAA section 126(b)] finding," and 2023 is more than 3 years after the deadline by which the EPA must act on the NY DEC petition.

After asserting that the identified sources within the named upwind states significantly contribute to nonattainment or interfere with maintenance of the 2008 and 2015 ozone NAAQS in New York, the petition further asserts that these named sources can reasonably be retrofitted

⁸ See the EPA's October 27, 2017 memorandum titled, "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)" that provided future year ozone design values for monitoring sites in the U.S. based on updated air quality modeling (for 2023) and monitoring data.

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with control equipment or can operate existing controls more frequently to reduce NO_X emissions. The petition requests that the EPA establish permanent and enforceable emissions limitations for the named sources at levels designed to prevent them from significantly contributing to nonattainment or interfering with maintenance in New York State. Specifically, the petition requests that the named sources be subject to emissions limits consistent with Reasonably Available Control Technology (RACT) as defined by New York State, which bases its presumptive limits and facility-specific control analyses on a standard of \$5,000 per ton of NO_X reduced. The petition acknowledges that some of the facilities identified in the petition may already operate with a NO_X emissions rate similar to New York's RACT limits. Nonetheless, the petition asks that the EPA establish enforceable daily emissions limits during the ozone season to require these sources to continue to operate at these rates in the future. The petition claims that enforceable emissions limits would prevent emissions controls from being turned off, which the petition asserts occurs when the sources in the state are collectively emitting well below their seasonal CSAPR budgets. Section III.D of the proposal provides more detail regarding the content of the New York CAA section 126(b) petition.

After receiving New York's CAA section 126(b) petition in March of 2018, and consistent with CAA section 307(d)(10), the EPA determined that the 60-day period for responding to New York's petition was insufficient for the EPA to act on the petition. On May

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11, 2018, the EPA published a notice extending the deadline for acting on New York's CAA section 126(b) petition to November 9, 2018.⁹ This notice is in the docket for this rulemaking.

C. Summary of the EPA's May 6, 2019, Proposal

In Section IV of the proposal, the EPA explained its basis for proposing to deny the CAA section 126(b) petition from New York. Given that ozone is a regional pollutant and that the EPA had recently evaluated regional ozone pollution in two recent rulemakings – the CSAPR Update¹⁰ and the Determination Regarding Good Neighbor Obligations for the 2008 Ozone National Ambient Air Quality Standard¹¹ (the Determination Rule) – the EPA proposed to evaluate New York's CAA section 126(b) petition consistent with the same four-step interstate transport framework (*see* Section II.C.1 of this action) that the EPA has used in previous regulatory actions to evaluate regional ozone transport problems.

The EPA identified multiple bases for the proposed denial. The EPA noted that the Agency's historical approach to evaluating CAA section 126(b) petitions first looks at whether a petition independently identifies or establishes a technical basis for the requested CAA section 126(b) finding. 84 FR 22797. In this regard, the Agency proposed to find that several aspects of New York's analyses are insufficient to support New York's conclusion that the sources named

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⁹ 83 FR 21909 (May 11, 2018).

¹⁰ 81 FR 74504 (October 26, 2016).

¹¹ 83 FR 65878 (December 21, 2018).

in the petitions emit or would emit in violation of the good neighbor provision. First, considering step 1 of the four-step interstate transport framework, the EPA proposed to find that New York's petition does not provide sufficient information to demonstrate that there is a current or expected future downwind nonattainment or maintenance problem in Chautauqua County with respect to either the 2008 or the 2015 ozone NAAQS. *Id.* at 22800. Similarly, with respect to the NYMA, the EPA proposed to find, at step 1, that the New York petition does not provide sufficient information to indicate that there will be a future nonattainment or maintenance problem with respect to the 2008 ozone NAAQS. *Id.* at 22800-01. Second, considering step 3 of the four-step interstate transport framework, the EPA proposed to find that material elements in New York's analyses are technically deficient, such that the EPA cannot conclude that any source or group of sources in any of the named states will significantly contribute to nonattainment or interfere with maintenance in Chautauqua County or the NYMA relative to the 2008 and 2015 ozone NAAQS. *Id.* at 22802.

The EPA further proposed to rely on its own independent analysis to evaluate the requested CAA section 126(b) findings at step 1 considering available air quality monitoring and modeling data. *Id.* at 22800. The EPA proposed to find that its independent analysis provides no basis to conclude that Chautauqua County will have an air quality problem relative to either the 2008 or the 2015 ozone NAAQS. The EPA explained that the 2015-2017 design value in

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Chautauqua County is 68 ppb, which is below the level of both the 2008 and 2015 ozone

NAAQS.¹² Furthermore, the EPA indicated that it had recently finalized a determination that the

Jamestown, New York Marginal nonattainment area (Chautauqua County) has attained the 2008

ozone NAAQS.13 Additionally, Section IV.B of the proposal explained that the EPA's

examination in the Determination Rule of the 2023 projected design values for Chautauqua

County indicates that this area is not projected to be in nonattainment or have a maintenance

problem in 2023 for the 2008 ozone NAAQS. The EPA's air quality modeling supporting the

Determination Rule also indicates that the monitor in Chautauqua County is expected to continue

to both attain and maintain the 2015 ozone NAAQS standard in 2023, with an average 2023

design value of 58.5 ppb and a maximum 2023 design value of 60.7 ppb.¹⁴

The EPA also proposed to find that its independent analysis, conducted to support the

Determination Rule, provides no basis to conclude that the NYMA will have a future air quality

¹² The 2015-2017 design value for Chautauqua County in the "Jamestown-Dunkirk-Fredonia, NY CBSA" at AQS site 360130006 is 68 ppb. Available at

https://www.epa.gov/sites/production/files/2018-

¹³ See Approval and Promulgation of Air Quality Implementation Plans; New York;

Determination of Attainment of the 2008 8-Hour Ozone National Ambient Air Quality Standard for the Jamestown, New York Marginal Nonattainment Area, 83 FR 49492 (October 2, 2018). ¹⁴ See 2023 design values for AQS site 360130006 in spreadsheet released with the EPA's March 2018 memorandum. Available at *https://www.epa.gov/sites/production/files/2018-05/updated 2023 modeling dvs collective contributions.xlsx*.

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^{07/}ozone_designvalues_20152017_final_07_24_18.xlsx.

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problem relative to the 2008 ozone NAAQS. The EPA's examination of the 2023 projected design values for the NYMA indicates that this area is not projected to be in nonattainment or have a maintenance problem in 2023 for the 2008 ozone NAAQS. However, the modeling indicates that the NYMA is projected to be in nonattainment in 2023 with respect to the 2015 ozone NAAQS.

As noted previously, considering step 3 of the four-step interstate transport framework, the EPA proposed to find that material elements in New York's analyses are technically deficient, such that the EPA cannot conclude that any source or group of sources in any of the named states will significantly contribute to nonattainment or interfere with maintenance in Chautauqua County or the NYMA relative to the 2008 and 2015 ozone NAAQS. As discussed in Section IV.B of the proposal, the EPA did not independently conduct a regional step 3 analysis for any sources with respect to the 2015 ozone NAAQS because the EPA interprets CAA section 126(b) as placing the burden on the petitioner to establish a technical basis for the specific finding requested, and, unlike the step 1 analysis, the EPA lacked information and analysis on which it could rely for such an independent step 3 analysis.

II. Background and Legal Authority

This section of the notice discusses background and legal authority relevant to this action beginning with an overview of ozone formation and interstate transport in Section II.A. Section

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II.B of this notice describes the key statutory provisions under both CAA sections 126 and 110(a)(2)(D)(i)(I), including the relationship between the good neighbor provision and CAA section 126(b). Section II.C summarizes the EPA's historical approach to addressing the interstate transport of ozone under the good neighbor provision to include a description of the four-step interstate transport framework and the EPA's prior regional rulemakings.

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A. Ground-level Ozone and the Interstate Transport of Ozone

On March 12, 2008, the EPA promulgated a revision to the ground-level ozone NAAQS, lowering both the primary and secondary standards to 75 ppb.¹⁵ On October 1, 2015, the EPA further revised the ground-level ozone NAAQS to 70 ppb.¹⁶

As discussed in Section III.A of the proposal, ground-level ozone is not emitted directly into the air but is a secondary air pollutant created by chemical reactions between ozone precursors, chiefly NOx and non-methane volatile organic compounds (VOCs), in the presence of sunlight. Emissions from mobile sources, EGUs, industrial facilities, gasoline vapors, and chemical solvents are some of the major anthropogenic sources of ozone precursors. These precursor emissions can be transported downwind directly or, after transformation in the atmosphere, as ozone. Studies have established that ozone formation, atmospheric residence, and transport can occur on a regional scale (*i.e.*, across hundreds of miles) over much of the eastern United States. Thus, in any given location, ozone pollution levels are affected by a combination of local emissions and emissions from upwind sources. Numerous observational studies have demonstrated the transport of ozone and its precursors and the impact of upwind emissions on

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¹⁵ See National Ambient Air Quality Standards for Ozone, Final Rule, 73 FR 16436 (March 27, 2008).

¹⁶ See National Ambient Air Quality Standards for Ozone, Final Rule, 80 FR 65292 (October 26, 2015).

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high concentrations of ozone pollution.¹⁷ For further discussion of ozone-formation chemistry and health effects, *see* the National Ambient Air Quality Standards for Ozone, Final Rule, 80 FR 65292 (October 26, 2015). For further discussion of the regional nature of interstate transport of ozone pollution *see* the Determination Rule, 83 FR 65879-80 (December 21, 2018).

B. CAA Sections 110 and 126

CAA sections 126 and 110(a)(2)(D)(i) provide the statutory authority for this action. 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), referred to as the good neighbor provision of the Act.¹⁸ 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.

¹⁷ For example, Bergin, M.S. et al. (2007). Regional air quality: local and interstate impacts of NO_X and SO₂ emissions on ozone and fine particulate matter in the eastern United States. Environmental Sci & Tech. 41: 4677-4689.

¹⁸ The text of CAA section 126 as codified in the U.S. Code cross-references CAA section 110(a)(2)(D)(ii) instead of CAA section 110(a)(2)(D)(i). The courts have confirmed that this is a scrivener's error and that Congress instead intended to cross-reference CAA section 110(a)(2)(D)(i). See Appalachian Power Co. v. EPA, 249 F.3d 1032, 1040–44 (D.C. Cir. 2001). Page 20 of 171

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CAA section 126 explains the effect 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 is a violation of section 126 of the Act and of the applicable 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 stay in operation more than 3 months after the date of the finding. The statute, however, also gives the Administrator discretion to permit the continued operation of a source beyond 3 months if the source complies with emissions limitations and 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 in any event no later than 3 years from the date of the finding.

Section 110(a)(2)(D)(i) of the CAA requires states to prohibit certain emissions from instate 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 3 years of promulgation of a new or revised NAAQS, to submit SIPs that contain adequate provisions prohibiting any source or other type of emissions activity within the state from emitting any air pollutant in amounts which will contribute significantly to nonattainment in, or interfere with maintenance by, any

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other state with respect to that NAAQS. As described further in Section II.C.2, the EPA has developed several regional rulemakings to address the requirements of CAA section 110(a)(2)(D)(i)(I) for the various ozone NAAQS. The EPA's most recent rulemaking, the Determination Rule, finalized a determination that the existing CSAPR Update fully addresses certain states' interstate transport obligations under CAA section 110(a)(2)(D)(i)(I) for the 2008 ozone NAAQS. 83 FR 65878 (December 21, 2018).

Section 110(a)(2)(D)(ii) of the CAA further requires SIPs to contain adequate provisions ensuring compliance with the applicable requirements of, *inter alia*, CAA section 126. Thus, where the EPA has made a finding pursuant to CAA section 126(b), this provision requires states to revise their SIPs to adopt any emissions limitations and compliance schedules provided by the EPA under CAA section 126(c).

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 can occur on a regional scale (*i.e.*, across hundreds of miles) and that many separate areas across the eastern U.S. have struggled to attain and maintain the NAAQS, the EPA has historically addressed the interstate transport of ozone pursuant to the good neighbor provision by promulgating

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rulemakings that addressed significant contribution and interference with maintenance through regional trading programs to reduce NO_X emissions. Each of these rulemakings followed a similar four-step interstate transport framework to evaluate and address the extent of the ozone transport problem (*i.e.*, the breadth of downwind ozone problems and the contributions from upwind states) and, ultimately, to find that downwind states' problems attaining and maintaining the ozone NAAQS result from an interconnected system of transported pollution emitted by multiple upwind sources located in different upwind states combined with downwind (*i.e.*, locally generated) ozone.

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1. Description of the Four-Step Interstate Transport Framework

Through the development and implementation of several previous rulemakings,¹⁹ the EPA established the following four-step interstate transport framework to address the requirements of the good neighbor provision for regional pollutants such as ozone and fine particulate matter (PM_{2.5}):

(1) <u>Identify downwind receptors that are expected to have problems attaining or</u> <u>maintaining the NAAQS</u>. The EPA historically identified downwind areas with air quality problems, referred to as receptors, using air quality modeling projections for a future analytic year and, where appropriate, considering monitored air quality data.

(2) <u>Determine which upwind states are linked to these identified downwind air quality</u> problems and thus warrant further analysis to determine whether their emissions violate the good <u>neighbor provision</u>. In the EPA's most recent transport rulemakings for the 1997 and 2008 ozone NAAQS, as well as the 1997 and 2006 PM_{2.5} NAAQS, the Agency identified such upwind states

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¹⁹ *See* Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone (also known as the NO_X SIP Call), 63 FR 57356 (October 27, 1998); Clean Air Interstate Rule (CAIR) Final Rule, 70 FR 25162 (May 12, 2005); CSAPR Final Rule, 76 FR 48208 (August 8, 2011); CSAPR Update Final Rule, 81 FR 74504 (October 26, 2016); Determination Rule, 83 FR 65878 (December 21, 2018).

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to be those modeled to contribute at or above an air quality threshold relative to the applicable NAAQS.

(3) For states linked to downwind air quality problems, identify upwind emissions (if any) on a statewide basis that will significantly contribute to nonattainment or interfere with <u>maintenance of a standard at a receptor in another state</u>. In the EPA's prior rulemakings for ozone and PM_{2.5}, the Agency identified and apportioned emissions reduction responsibility among multiple upwind states linked to downwind air quality problems by identifying a uniform level of control stringency for certain sources in the state based on cost and air quality factors evaluated in a multi-factor test.

(4) For upwind states that are found to have emissions that will significantly contribute to nonattainment or interfere with maintenance of the NAAQS downwind, implement the necessary emissions reductions within the state. When the EPA has promulgated federal implementation plans (FIPs) addressing the good neighbor provision for ozone and PM_{2.5} NAAQS in prior transport rulemakings, the EPA has typically required affected sources in upwind states to participate in allowance trading programs to achieve the necessary emissions reductions.²⁰ In

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²⁰ While the EPA has chosen to implement emissions reductions through allowance trading programs for states found to have a downwind impact, upwind states can choose to submit a SIP that implements such reductions through other enforceable mechanisms that meet the requirements of the good neighbor provision, such as the enforceable mechanisms that the petitioner apparently favors in its petition.

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addition, the EPA has also offered states the opportunity to participate in comparable EPAoperated allowance trading programs to achieve the necessary emissions reductions through SIPs.

Using the four-step framework to evaluate a particular interstate transport problem allows the EPA to determine whether upwind states actually contribute to a downwind air quality problem, whether and which sources can be cost-effectively controlled to address that downwind air quality problem, what level of emissions should be eliminated to address the downwind air quality problem (and thus should be considered "significant"), and the means of implementing corresponding emissions limits (*i.e.*, source-specific rates or statewide emissions budgets in a limited regional allowance trading program). The outcome of this assessment varies based on the scope of the air quality problem, the availability and cost of controls at sources in upwind states, and the estimated impact of upwind emissions reductions on downwind ozone concentrations.

2. Prior Regional Rulemakings Under the Good Neighbor Provision

The EPA's first regional interstate transport rulemaking, the NO_X SIP Call, addressed the 1979 ozone NAAQS. 63 FR 57356 (October 27, 1998).²¹ The NO_X SIP Call was the result of the

²¹ As originally promulgated, the NO_x SIP Call also addressed good neighbor obligations under the 1997 8-hour ozone NAAQS, but the EPA subsequently stayed the rule's provisions with respect to that standard. 65 FR 56245 (September 18, 2000). The EPA recently finalized an action rescinding the findings of good neighbor obligations with respect to the 1997 ozone NAAQS as a basis for the NO_x SIP Call. 84 FR 8422 (March 8, 2019). Page 26 of 171

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analytic work and recommendations of the Ozone Transport Assessment Group, which was organized and led by states in consultation with the EPA and other stakeholders. The EPA used this collaboratively developed analysis to conclude in the NO_X SIP Call that "[t]he fact that virtually every nonattainment problem is caused by numerous sources over a wide geographic area is a factor suggesting that the solution to the problem is the implementation over a wide area of controls on many sources, each of which may have a small or unmeasurable ambient impact by itself." 63 FR 57356, 57377 (October 27, 1998). The NOx SIP Call promulgated statewide emissions budgets and required upwind states to adopt SIPs that would decrease their NO_X emissions to meet these budgets, thereby prohibiting 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_X Budget Trading Program that states could adopt in their SIPs as a mechanism to achieve some or all required emissions reductions. All jurisdictions covered by the NO_X SIP Call ultimately chose to adopt the NO_X Budget Trading Program into their SIPs. The NO_X 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_X SIP Call rulemaking under CAA section 110(a)(2)(D)(i)(I), the EPA also addressed several pending CAA section 126(b) petitions submitted by eight

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northeastern states regarding the same air quality issues addressed by the NO_X SIP Call, specifically interstate ozone transport for the 1979 ozone NAAOS. These CAA section 126(b) petitions asked the EPA to find that ozone precursor emissions from numerous sources located in 30 states and the District of Columbia had adverse air quality impacts on the petitioning downwind states. Half of the petitioning states (i.e., Connecticut, Maine, New York, and Pennsylvania) requested an allowance trading program to reduce NO_X emissions and remedy regional interstate ozone transport. 63 FR 56297 (October 21, 1998). Based on analysis conducted for the NO_X SIP Call regarding upwind state impacts on downwind air quality, the EPA, in May 1999, made technical determinations regarding the claims in the petitions, but did not at that time make the CAA section 126(b) findings requested by the petitions. 64 FR 28250 (May 25, 1999). In making these technical determinations, the EPA concluded that the NO_X SIP Call would 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 resulted in a judicial stay of the NO_x SIP Call and led the EPA to "de-link" the CAA section 126(b) petition response from the NO_X SIP Call. The EPA made final CAA section 126(b) findings for 12 states named in the petitions 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

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ozone NAAQS based on the affirmative technical determinations made in the May 1999 rulemaking. 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_X Budget Trading Program model rule provided under the NO_X SIP Call. 65 FR 2674 (January 18, 2000). The EPA's action on these CAA section 126(b) petitions was upheld by the D.C. Circuit. *See Appalachian Power Co. v. EPA*, 249 F.3d 1032 (D.C. Cir. 2001).

The EPA next promulgated the Clean Air Interstate Rule (CAIR), 70 FR 25162 (May 12, 2005), to address interstate transport under the good neighbor provision with respect to the 1997 ozone NAAQS, as well as the 1997 PM_{2.5} NAAQS. 70 FR 25172. The EPA adopted the same approach for quantifying the level of states' significant contribution to downwind nonattainment in CAIR as it used in the NO_X SIP Call, based on the determination in the NO_X SIP Call that downwind ozone nonattainment is due to the impact of emissions from numerous upwind sources and states. 70 FR 25162, 25172 (May 12, 2005). 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 rulemaking to define significant contribution (*i.e.*, the emissions reduction obligation) under the good neighbor provision and

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provide for submission of SIPs eliminating that contribution, 70 FR 25162 (May 12, 2005); and (2) a rulemaking to promulgate, where necessary, FIPs imposing emissions limitations in the event states did not submit SIPs. 71 FR 25328 (April 28, 2006). The FIPs required EGUs in affected states to participate in regional allowance trading programs, which replaced the previous NOx Budget Trading Program.

In conjunction with the second CAIR rulemaking, which promulgated backstop 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_{2.5} 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 determinations either that the named states were not adversely impacting downwind air quality in violation of the good neighbor provision, or that such impacts were fully remedied by implementation of the emissions reductions required by the CAIR FIPs. 71 FR 25328, 25330 (April 28, 2006).

The D.C. Circuit found that the EPA's approach to CAA 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*,

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531 F.3d 896, 929 (D.C. Cir.), modified on reh'g, 550 F.3d 1176 (D.C. Cir. 2008). The decision concluded the EPA's analysis and compliance mechanisms 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 CSAPR to replace CAIR. 76 FR 48208 (August 8, 2011). CSAPR addressed the same (1997) ozone and PM_{2.5} NAAQS as CAIR and additionally addressed interstate transport for the 2006 PM_{2.5} NAAQS by requiring 28 states to reduce sulfur dioxide (SO₂) emissions, annual NO_X emissions, and/or ozone season NO_X emissions that would significantly contribute to other states' nonattainment or interfere with other states' ability to maintain these air quality standards. Consistent with prior determinations made in the NO_X SIP Call and CAIR, the EPA again found that emissions from sources in multiple upwind states contributed to ozone nonattainment in multiple downwind states. Specifically, the EPA found "that the total 'collective contribution' from upwind sources represents a large portion of PM_{2.5} and ozone at downwind locations and that the total amount of transport is composed of the individual contribution from numerous upwind states." 76 FR 48237. Accordingly, the EPA conducted a regional analysis, calculated emissions budgets for affected states, and required EGUs in these states to participate in new regional allowance

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trading programs to reduce statewide emissions levels.²² CSAPR was subject to nearly 4 years of litigation. Ultimately, the Supreme Court upheld the EPA's approach to calculating emissions reduction obligations and apportioning upwind state responsibility under the good neighbor provision, but also held that the EPA was precluded from requiring more emissions reductions than necessary to address downwind air quality problems, or "over-controlling" upwind state emissions. *See EPA v. EME Homer City Generation, L.P.*, 572 U.S. 489, 521-22 (2014) (*EME*

Homer City).²³

In 2016, the EPA promulgated the CSAPR Update to address the good neighbor

provision requirements for the 2008 ozone NAAQS. 81 FR 74504 (October 26, 2016). The

CSAPR Update built upon previous regulatory efforts to address the collective contributions of

ozone pollution from 22 states in the eastern U.S. to widespread downwind air quality problems.

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²² The CSAPR trading programs included assurance provisions to ensure that emissions are reduced within each individual state, in accordance with *North Carolina*, 531 F.3d at 907-08 (holding the EPA must require elimination of emissions from each upwind state that contribute significantly to nonattainment and interfere with maintenance in downwind areas). Those provisions were also included in the CSAPR Update and took effect with the 2017 CSAPR compliance periods.

²³ On remand from the Supreme Court, the D.C. Circuit further affirmed various aspects of the CSAPR, while remanding the rule without vacatur for reconsideration of certain states' emissions budgets where it found those budgets may over-control emissions beyond what was necessary to address the good neighbor requirements. *EME Homer City Generation, L.P. v. EPA*, 795 F.3d 118 (2015) (*EME Homer City II*). The EPA addressed the remand in several rulemaking actions in 2016 and 2017.

As with previous rulemakings, the EPA evaluated the nature (*i.e.*, breadth and interconnectedness) of the ozone problem and NO_X reduction potential from EGUs, including essentially all the EGUs at the facilities named in the New York CAA section 126(b) petition.²⁴ In the CSAPR Update, the EPA quantified emissions reduction obligations for each state based on an analysis of control strategies that could be implemented by the upcoming 2017 ozone season, which coincided with the (then) upcoming 2018 Moderate area attainment date. The EPA implemented those emissions reductions through FIPs which required EGUs in affected states to participate in a regional allowance trading program to further reduce statewide NO_X emissions levels. The CSAPR Update is subject to pending legal challenges in the D.C. Circuit. *Wisconsin v. EPA*, No. 16–1406 (D.C. Cir. argued October 3, 2018).

At the time the EPA finalized the CSAPR Update in 2016, the EPA was unable to determine whether the rule fully resolved good neighbor obligations with respect to the 2008 ozone NAAQS for most (*i.e.*, 21) of the states subject to that action, including those addressed in New York's petition (*i.e.*, Illinois, Indiana, Kentucky, Maryland, Michigan, Ohio, Pennsylvania,

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²⁴ The EPA uses the language "*essentially all* the EGUs at the facilities named...." (emphasis added) to clarify that the New York petition identifies sources at the facility, rather than at the unit, level. The CSAPR Update looked at unit-level data and included all fossil-fuel-fired boiler or combustion turbine EGUs with a capacity (electrical output) greater than 25 megawatts (MW). *See* 81 FR 74563 (October 26, 2016).

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Virginia and West Virginia). The EPA stated that, based on its analysis of 2017 air quality at that time, the emissions reductions required by the rule "may not be all that is needed" to address transported emissions.²⁵ 81 FR 74521–22 (October 26, 2016). The information available at that time suggested that downwind air quality problems would remain in 2017 after implementation of the CSAPR Update and that upwind states continued to be linked to those downwind problems at or above the 1 percent threshold used at step 2 of the EPA's analysis. However, in the CSAPR Update, the EPA could not determine whether, in step 3 of the four-step interstate transport framework, the EPA had quantified all emissions reductions that may be considered cost-effective because the rule did not evaluate non-EGU ozone season NOx reductions or further EGU control strategies (*i.e.*, the implementation of new post-combustion controls) that may be achievable on timeframes extending beyond the 2017 analytic year used in the EPA's analysis. The Agency recognized that completing such an analysis could extend the timeframe for action and prioritized the substantial short-term emissions reductions achievable for the 2017 ozone season. *See* 81 FR 74521 for additional details.

On December 6, 2018, the EPA finalized a determination that, based on the latest available emissions inventory and air quality modeling data for a 2023 analytic year, the CSAPR

²⁵ The EPA determined that the emissions reductions required by the CSAPR Update satisfied the full scope of the good neighbor obligation for Tennessee with respect to the 2008 ozone NAAQS. 81 FR 74551–52 (October 26, 2016). Page 34 of 171

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Update fully addresses the good neighbor provision requirements for the 2008 ozone NAAOS for 20 eastern states (among the 22) previously addressed in the CSAPR Update. 83 FR 65878 (December 21, 2018). The EPA's Determination Rule applied the four-step interstate transport framework but did not move beyond an analysis at step 1, because the EPA found that there would be no remaining nonattainment or maintenance receptors for the 2008 ozone NAAQS in the eastern U.S. in 2023. Therefore, with the CSAPR Update fully implemented, the EPA finalized in the Determination Rule a finding that the 20 states addressed by that action (including eight of the nine states named in New York's petition) will not contribute significantly to nonattainment in, or interfere with maintenance by, any other state regarding the 2008 ozone NAAOS. The EPA had already determined that the remaining two states would have no remaining good neighbor obligation for the 2008 ozone NAAQS - one in the CSAPR Update (Tennessee), 81 FR 74540 (October 26, 2016), and the other in a separate SIP approval (Kentucky, the ninth state named in New York's petition), 83 FR 33730 (July 17, 2018), that relied on the same air quality modeling used in the Determination Rule. The Determination Rule is subject to pending legal challenges in the D.C. Circuit. New York v. EPA, No. 19-1019 (D.C. Cir.).

Most recently, the EPA acted on six CAA section 126(b) petitions pertaining to the 2008 and 2015 ozone NAAQS submitted by the states of Connecticut, Delaware, and Maryland

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regarding various sources in five upwind states. In denying the petitions, the EPA applied the same four-step interstate transport framework used in prior rulemakings and relied on analysis and determinations made in the CSAPR Update for purposes of evaluating the good neighbor obligations with respect to the 2008 ozone NAAQS. 83 FR 16064 (April 13, 2018) (Connecticut) 83 FR 50444 (October 5, 2018) (Delaware and Maryland).²⁶ The EPA found that the downwind areas were not projected to have problems attaining or maintaining the NAAQS (step 1) and/or that the petition failed to identify cost-effective emissions reductions for the affected sources (step 3), particularly where enforceable emissions limits had already been implemented for certain sources in the form of state-wide emissions budgets and, thus, the EPA already had addressed their significant contribution or interference with maintenance for those sources.

III. The EPA's Final Response to the CAA Section 126(b) Petition from New York

The EPA is finalizing a denial of the CAA section 126(b) petition from New York. Section III.A of this notice describes the reasonableness of applying the four-step interstate transport framework as the standard of review in evaluating New York's CAA section 126(b) petition. Section III.B discusses the EPA's general standard of review of CAA section 126(b) petitions. Section III.C describes the EPA's determination that New York has not demonstrated

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²⁶ The EPA's denial of the Delaware and Maryland petitions is subject to pending legal challenges in the D.C. Circuit. *Maryland v. EPA*, No. 18–1285 (D.C. Cir. filed October 15, 2018).

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that the sources named in its petition emit or would emit in violation of the good neighbor provision such that they will significantly contribute to nonattainment or interfere with maintenance of the 2008 or 2015 ozone NAAQS in New York. Where the EPA has currently available information to inform an independent analysis of New York's petition, we also present this information in Section III.C. In Section III, generally, and in the RTC document included in the docket for this action, the Agency explains the rationale supporting its final action and provides its response to significant public comments on the proposed action.

A. Reasonableness of Applying the Four-Step Interstate Transport Framework for This Action

As discussed in Section II.C of this notice, the EPA has consistently analyzed ozone transport with the understanding that nonattainment and maintenance concerns result from the cumulative air quality impacts of contributions from numerous anthropogenic sources across several upwind states (as well as from within the downwind state). Consistent with this understanding, the EPA has historically evaluated ozone transport based, in part, on the relative contribution of all anthropogenic sources within a state, as measured against a screening

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threshold, and then identified particular source sectors and units for regulatory consideration.²⁷ This approach to evaluating ozone transport is reasonable because the statute's use of "significantly" as a modifier to "contribute" implies a relationship (*e.g.*, the impact a source or collection of sources has relative to other relevant sources of that pollutant). Therefore, although CAA section 126(b) allows downwind states to petition the EPA regarding specific sources or groups of sources that they believe are contributing to the downwind air quality problems, the EPA believes it is reasonable and appropriate to evaluate the emissions from sources named in a CAA section 126(b) petition in the context of all relevant anthropogenic sources of that pollutant to determine whether emissions from the named sources violate the good neighbor provision. In this way, the EPA can evaluate whether the petitioner has appropriately identified the source or group of sources that should be regulated.

The EPA notes that the four-step framework provides a logical, consistent and systematic approach for addressing interstate transport for a variety of criteria pollutants under a broad array of national, regional and local scenarios. Consequently, the EPA finds it reasonable to apply the same four-step interstate transport framework used to evaluate regional ozone transport under the

²⁷ The EPA has used cost as a factor in its multi-factor approach for quantifying significant contribution from multiple contributing states. Cost is used in a relative (*i.e.*, least-cost abatement) approach that also requires examining individual source impact and reduction potential in the context of the larger universe of contributors. Page 38 of 171

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good neighbor provision in considering a CAA section 126(b) petition addressing the impacts of individual sources on downwind attainment and maintenance of the ozone NAAQS. As the fourstep interstate transport framework is applied to evaluate a particular interstate transport problem, the EPA can determine whether upwind sources are actually contributing to a downwind air quality problem; whether and which sources can be cost effectively controlled relative to that downwind air quality problem; what level of emissions should be eliminated to address the downwind air quality problem and the means of implementing corresponding emissions limits (*i.e.*, source-specific rates, or statewide emissions budgets in a limited regional allowance trading program). The outcome of this assessment will vary based on the scope of the air quality problem, the availably and cost of controls at sources in upwind states and the relative impact of upwind emissions reductions on downwind ozone concentrations.

The complexity of atmospheric chemistry and nature of ozone transport also demonstrate the appropriateness of applying the four-step interstate transport framework in considering a CAA section 126(b) petition. As a result of this complexity, including domestic and international as well as anthropogenic and background contributions to ozone and its precursors, it is less likely that a single source is entirely responsible for impacts to a downwind area. Thus, a determination regarding whether this impact is sufficient to significantly contribute to nonattainment or interfere with maintenance of the NAAQS—in light of other anthropogenic

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emissions sources impacting a downwind area—is necessarily more complicated. The EPA therefore evaluates within step 3 of the framework whether upwind sources have emissions that significantly contribute to nonattainment or interfere with maintenance of the ozone NAAQS based on various control, cost and air quality factors, including the magnitude of emissions from upwind states, the amount of potential emissions reductions from upwind sources, the cost of those potential emissions reductions, and the potential air quality impacts of emissions reductions.²⁸ The EPA believes it is reasonable to consider these factors whether evaluating ozone transport in the context of a good neighbor SIP under CAA section 110 or a CAA section 126(b) petition.

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²⁸ "We believe it is important to consider both [cost and air quality] factors because circumstances related to different downwind receptors can vary and consideration of multiple factors can help EPA appropriately identify each state's significant contribution under different circumstances... Using both air quality and cost factors allows EPA to consider the full range of circumstances and state-specific factors that affect the relationship between upwind emissions and downwind nonattainment and maintenance problems. For example, considering cost takes into account the extent to which existing plants are already controlled as well as the potential for, and relative difficulty of, additional emissions reductions. Therefore, EPA believes that it is appropriate to consider both cost and air quality metrics when quantifying each state's significant contribution." Proposed Federal Implementation Plans To Reduce Interstate Transport of Fine Particulate Matter and Ozone, 75 FR 45210, 45271 (August 2, 2010) (CSAPR proposal) (describing potential disparities between upwind and downwind state contributions to identified air quality problems and between levels of controls between states).

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For any analysis of a CAA section 126(b) petition regarding interstate transport of ozone, a regional pollutant with contribution from a variety of sources, the EPA reviews whether the particular sources identified by the petitioner should be controlled in light of the collective impact of emissions on air quality in the area, including emissions from other anthropogenic sources. Thus, review of the named sources in New York's petition provides a starting point for the EPA's evaluation, but does not—as the commenters suggest—complete the evaluation to determine whether the named sources emit or would emit in violation of the good neighbor provision.

Several commenters assert that the EPA incorrectly applied the four-step interstate transport framework used to address CAA section 110(a)(2)(D)(i)(I) to the separate provision under CAA section 126(b). Specifically, one commenter states that the four-step interstate transport framework aligns with the planning requirements under CAA section 110(a)(2)(D)(i)(I) because it allows contribution to be apportioned by state boundaries particularly at step 2, which considers whether an upwind state is linked to the downwind air quality problem above an identified air quality threshold. The commenter explains that applying such a threshold allows the collective "significant contribution" from a group of sources located in multiple upwind states to be apportioned into "non-significant contributions" according to state boundaries. The commenter continues by stating that the provisions in CAA section 126 apply to source

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emissions regardless of state boundaries, thereby better reflecting the science of air pollution transport and allowing a state to petition for, were the EPA to grant the petition, the application of emissions reductions requirements to a group of stationary sources located in multiple upwind states.

A second commenter notes that the EPA's use of the four-step interstate transport within CAA section 126(b) does not facilitate the application of the CAA section 126(b) petition mechanism as intended, which the commenter articulates as including the use of such petitions and the EPA's action thereupon as a precise tool to control specific sources (*e.g.*, EGUs), potentially through the imposition of emissions limits including shorter averaging times. The commenter notes that the good neighbor provision, as the EPA has historically implemented it, relies on regional trading programs and robust emissions allowance pools, which do not guarantee control of emissions from nearby, upwind sources on high electric demand days that are most conducive to downwind ozone formulation.

The EPA disagrees with commenters who assert that its application of the four-step interstate transport framework used to address requirements under the good neighbor provision is not appropriate to address CAA section 126(b) petitions. While either CAA section 126(b) or CAA section 110(a)(2)(D)(i)(I) may be applied to address interstate transport, as discussed in Section III.B, the cross-reference in CAA section 126(b) to the prohibition in CAA section

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110(a)(2)(D)(i) means that the same substantive standard is used to determine whether there is a violation under either section and, therefore, whether emissions should be prohibited in either a good neighbor SIP or in a finding under CAA section 126(b). Moreover, the EPA also believes its use of the four-step interstate transport framework to evaluate a CAA section 126(b) petition continues to be technically justified, especially as it applies to New York's petition addressing the impacts of hundreds of sources to alleged ozone nonattainment downwind.

As discussed earlier, the EPA agrees with commenters that ozone nonattainment problems result from the cumulative air quality impacts of relatively smaller contributions from numerous anthropogenic sources across several upwind states (as well as from within the downwind state). Thus, evaluating which upwind states and sources should be held responsible for addressing downwind nonattainment presents a "thorny causation problem." *EME Homer City*, 572 U.S. at 514. This is true whether the EPA is evaluating the problem in the context of reviewing a SIP or promulgating a FIP under CAA section 110(a)(2)(D)(i)(I) or in the context of evaluating a petition targeting individual sources under CAA section 126(b). The four-step interstate transport framework provides a reasonable approach to identifying which upwind states and sources among many should bear the responsibility for implementing emissions reductions to benefit downwind air quality.

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Thus, the EPA disagrees with commenters asserting that application of a statewide air quality threshold at step 2 is inappropriate under CAA section 126(b). First, as discussed further in Section III.C of this notice, while the EPA is not taking a position regarding what air quality threshold is most appropriately applied with respect to the 2015 ozone NAAQS, the EPA agrees that its modeling shows that upwind states named in the petition are all linked to a projected air quality problem in the NYMA using the 1 percent threshold that the EPA has used in other recent rulemakings to evaluate step 2 linkages. Accordingly, although the EPA is not here deciding whether the 1 percent threshold is the only appropriate screening level that might be applied for good neighbor analysis for the 2015 ozone NAAQS in other contexts (such as the EPA's review of SIP submissions²⁹ addressing 2015 ozone NAAQS good neighbor obligations), the EPA has not proposed to deny the petition on the basis of any analysis at step 2, and the commenter's concern that the use of any statewide air quality threshold is ill-suited to a CAA section 126(b) petition is not raised in this action.

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²⁹ See Analysis of Contribution Thresholds for Use in Clean Air Act Section 110(a)(2)(D)(i)(I) Interstate Transport State Implementation Plan Submissions for the 2015 Ozone National Ambient Air Quality Standards (August 2018) (providing analysis to support potential use of a 1 ppb threshold in the development of good neighbor SIPs for the 2015 ozone NAAQS). Available at *https://www.epa.gov/sites/production/files/2018-*09/documents/contrib thresholds transport sip subm 2015 ozone memo 08 31 18.pdf.

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The EPA further notes that both New York's petition and the commenters conflate the EPA's use of an air quality threshold at step 2 with the full analysis used under the four-step interstate transport framework as a whole for apportioning responsibility for emissions reductions among upwind states and sources. New York's CAA section 126(b) petition uses a 1 percent threshold to identify states that are linked to the downwind air quality problems and asserts that all the emissions from the named sources that collectively exceed 1 percent are deemed significant. However, this misunderstands the EPA's use of the air quality threshold in the context of the four-step interstate transport framework. If an upwind state's air quality impact to an identified downwind air quality problem exceeds the threshold as determined at step 2, the EPA then turns to the evaluation of additional cost and air quality factors at step 3 to determine what amount of emissions, if any, from an upwind state should be considered to significantly contribute to the downwind air quality problems. If the collective air quality contribution does not exceed the threshold, then emissions from within the state are considered not to significantly contribute to the downwind air quality problem. Thus, the EPA reasonably uses an air quality threshold at step 2 of the four-step interstate transport framework as one aspect of the resolution of the "thorny causation" problem by identifying which states' collective impact is sufficiently large to merit further review of the emissions reduction potential at sources within the state. As the cumulative nature of the ozone problem remains the same whether evaluated under CAA

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section 110(a)(2)(D)(i)(I) or section 126(b), the EPA believes that it is reasonable to apply a statewide air quality threshold in this case as in the four-step interstate transport framework that it has historically used to implement the good neighbor provision.

The EPA also disagrees that its use of the four-step interstate transport framework precludes the targeted, source-specific remedy provided for by CAA section 126(c). Although the EPA has used regional trading programs to address good neighbor obligations in past rulemakings under both CAA section 110(a)(2)(D)(i)(I) and CAA section 126(b), the application of the framework does not dictate that the remedy at step 4 necessarily be implemented in a particular manner. Thus, the four-step interstate transport framework can be applied in the context of CAA section 126(b) to determine whether a source is operating in violation of the good neighbor provision with sufficient flexibility to permit the application of an appropriately demonstrated remedy under CAA section 126(c), whether through a regional trading program or source-specific emissions limits.

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B. The EPA's Standard of Review for this CAA Section 126(b) Petition Regarding the 2008 and 2015 8-hour Ozone NAAQS

As discussed in Section II.B of this action, 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. CAA section 126(b) does not, however, identify a specific methodology or specific criteria for the Administrator to apply when making a CAA section 126(b) finding or denying a petition. Therefore, the EPA has the discretion to identify relevant criteria and develop a reasonable approach for evaluating a CAA section 126(b) petition. *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).

With respect to the statutory requirements of section 126 and section 110(a)(2)(D)(i) of the CAA, 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).³⁰ The fact that Congress did not indicate any preference for one over the other suggests that either tool could serve as a legitimate means to produce the

³⁰ 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.

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desired result, which is to mitigate significant contribution to nonattainment and interference with maintenance of the NAAQS in downwind states. While the provisions in CAA section 110(a)(2)(D)(i) and section 126 are independent, they are also closely linked. 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, accordingly, both provisions are reasonably interpreted to construe significant contribution to nonattainment and interference with maintenance identically, 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 CAA section 126(b) petition for ozone transport, the EPA believes it is appropriate to interpret the ambiguous terms incorporated by the cross-reference to CAA section 110(a)(2)(D)(i) (*i.e.*, "contribute significantly to nonattainment" and "interfere with maintenance")³¹ consistent with the EPA's past approach to evaluating interstate ozone pollution transport under the good neighbor provision, and its interpretation and application of that related provision of the statute. As previously discussed, ozone is a regional air pollutant and the EPA's previous analyses and regulatory actions have evaluated the regional interstate ozone transport problem using the four-step interstate transport framework. The EPA most recently applied this

³¹ The Supreme Court confirmed that these terms are ambiguous in *EME Homer City* and that the EPA is therefore delegated the authority to reasonably interpret the provisions. 572 U.S. at 514-15 n.18.

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four-step interstate transport framework in promulgating the CSAPR Update and the Determination Rule to address interstate transport with respect to the 2008 ozone NAAQS under CAA section 110(a)(2)(D)(i)(I). This approach is particularly applicable with respect to New York's claims regarding the 2008 ozone NAAQS because both rulemakings address projected air quality problems in New York and the impacts of upwind states, including those named in the petition, on such areas.³² 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. Therefore, in this instance, the EPA's decision whether to grant or deny the CAA section 126(b) petition regarding the 2008 8-hour ozone NAAQS depends on application of the four-step interstate transport framework.

While the EPA previously applied the four-step interstate transport framework and interpreted significant contribution and interference with maintenance under CAA section 110(a)(2)(D)(i) for the 2008 ozone NAAQS via the CSAPR Update and the Determination Rule,

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³² The EPA similarly evaluated the impact of Kentucky on New York's air quality after implementation of the CSAPR Update in approving the former state's SIP submission and concluded Kentucky's good neighbor obligations for the 2008 ozone NAAQS were fully addressed by the CSAPR Update. 83 FR 33730 (July 17, 2018). No legal challenges to the EPA's determinations in that SIP action were filed within the period for judicial review.

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the EPA has not engaged in a regional rulemaking action to apply the good neighbor provision for the 2015 ozone NAAQS. However, the EPA has released technical information intended to inform states' development of SIPs to address the 2015 ozone standard.³³ This information included the results of air quality modeling to identify potential downwind air quality problems in 2023, which we discuss in more detail in Section III.C.1 of this document. As part of the memorandum releasing the technical information, the EPA acknowledged that states have the flexibility to pursue approaches that may differ from the EPA's historical approach to evaluating interstate transport in developing their good neighbor SIPs.³⁴ Nonetheless, the EPA's technical analysis and the potential flexibilities identified in the memorandum generally followed the basic elements of the EPA's historical four-step interstate transport framework. As described previously, CAA section 126(b) does not identify a specific methodology or specific criteria for

³³ See Information on the Interstate Transport State Implementation Plan Submissions for the 2015 Ozone National Ambient Air Quality Standards under Clean Air Act Section 110(a)(2)(D)(i)(I) (March 27, 2018).

³⁴ The EPA has also released two additional memoranda providing guidance to states developing good neighbor SIPs for the 2015 ozone NAAQS. *See* Analysis of Contribution Thresholds for Use in Clean Air Act Section 110(a)(2)(D)(i)(I) Interstate Transport State Implementation Plan Submissions for the 2015 Ozone National Ambient Air Quality Standards (August 31, 2018); and Considerations for Identifying Maintenance Receptors for Use in Clean Air Act Section 110(a)(2)(D)(i)(I) Interstate Transport State Implementation Plan Submissions for the 2015 Ozone National Ambient Air Quality Standards (October 19, 2018). All three memoranda are available in the docket for this final action and at *https://www.epa.gov/airmarkets/memo-and-supplemental-information-regarding-interstate-transport-sips-2015-ozone-naaqs.* Page 50 of 171

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the Administrator to apply when making a CAA section 126(b) finding or denying a petition. Thus, given the EPA's discretion to identify relevant criteria and develop a reasonable approach to inform a CAA section 126(b) finding, the EPA believes that it continues to be appropriate for the Agency to evaluate the claims regarding the 2015 ozone NAAQS in New York's CAA section 126(b) petition consistent with the EPA's four-step interstate transport framework used to evaluate other ozone NAAQS.

Accordingly, because the EPA interprets "contribute significantly to nonattainment" and "interfere with maintenance" to mean the same thing under both CAA sections 110(a)(2)(D)(i)(I) and 126(b), the EPA's decision whether to grant or deny a CAA section 126(b) petition regarding both the 2008 and 2015 ozone NAAQS depends on application of the analysis used to address CAA section 110(a)(2)(D)(i)(I). That is, the EPA assesses whether there is a downwind air quality problem in the petitioning state (*i.e.*, step 1 of the four-step interstate transport 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 2); and, if such a linkage exists, whether (balancing various cost and air quality factors) there are cost-effective emissions reductions available from sources in the upwind state to support a conclusion that the sources in the state significantly contribute to nonattainment or interfere with maintenance of the NAAQS (*i.e.*, step 3). If the EPA makes a CAA section 126(b) finding based on its determination that a source or

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sources will significantly contribute to nonattainment or interfere with maintenance, then the EPA will implement a remedy under CAA section 126(c) to ensure that the violation of the good neighbor provision is addressed through permanent and enforceable measures (*i.e.*, step 4).

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. Stated another way, requiring additional reductions from upwind sources would result in eliminating emissions that do not contribute significantly to nonattainment or interfere with maintenance of the NAAQS. Such an action is 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 EME Homer City*, 572 U.S. at 515 n.18, 521-22 (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 the EPA approved a state's SIP as adequately meeting the requirements of CAA section 110(a)(2)(D)(i)(I) for a specific NAAQS, the EPA would not find that a source in that state was emitting in violation of the prohibition of CAA section

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110(a)(2)(D)(i)(I) absent new information demonstrating that the SIP is now insufficient to address the prohibition for that NAAQS. Similarly, if the EPA has promulgated a FIP that fully eliminates emissions that significantly contribute to nonattainment or interfere with maintenance in a downwind state for a specific NAAQS, the EPA has no basis to find that sources in the upwind state are emitting or would emit in violation of the CAA section 110(a)(2)(D)(i)(I)prohibition, absent new information to the contrary for that NAAQS.

The EPA notes that the approval of a SIP or promulgation of a FIP implementing CAA section 110(a)(2)(D)(i)(I) constitutes a determination that a state's emissions are adequately controlled considering the specific facts that the EPA analyzed while approving the SIP or promulgating the FIP. If a petitioner produces new data or information showing a different level of contribution or other facts the EPA did not consider when approving the SIP or promulgating the FIP, compliance with a SIP or FIP may not be determinative regarding whether the upwind sources emit or would emit in violation of the prohibition of CAA 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 state is implementing a SIP or the EPA is implementing a FIP addressing CAA section 110(a)(2)(D)(i)(I) for a particular NAAQS, the

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EPA will evaluate the CAA section 126(b) petition to determine if the submitted petition raises new information that merits further consideration.

Turning to the comments on the EPA's proposed standard of review, several commenters took issue with the EPA's application of the four-step interstate transport framework under CAA section 126, arguing that in doing so the EPA is "unlawfully eliminating [CAA] section 126 as an independent statutory tool for downwind states." Commenters disagreed with the EPA's interpretation of the relationship between the good neighbor provision under CAA sections 110(a)(2)(D)(i)(I) and 126(b), contending that Congress intended CAA section 126(b) petitions to be a legal tool to address interstate problems separate and distinct from SIP and FIP actions under CAA section 110. Commenters cite to legislative history and the Third Circuit's opinion in GenOn, 722 F.3d at 520-23, in support of their assertions that CAA section 126 is intended to remedy interstate transport problems notwithstanding the existence of CAA section 110. Commenters accordingly assert the EPA is incorrect in determining that its four-step interstate transport approach under CAA section 110(a)(2)(D)(i)(I) is appropriate for evaluating under CAA section 126(b) whether an upwind source or group of sources will significantly contribute to nonattainment or interfere with maintenance of the 2008 and the 2015 ozone NAAQS in a petitioning downwind state.

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The EPA has consistently acknowledged in prior actions under CAA section 126(b) that Congress created the good neighbor provision and CAA section 126 as two independent statutory processes to address one problem: interstate pollution transport. See, e.g., 83 FR 26666, 26675 (June 8, 2018) (proposal for this final action); 76 FR 69052, 69054 (November 7, 2011) (proposed action for the EPA's final action on New Jersey's CAA section 126(b) petition regarding SO₂ emissions from Portland Generating Station). As the commenters point out, the Third Circuit has upheld the EPA's position that CAA sections 110(a)(2)(D)(i) and 126 are two independent statutory processes to address the same problem of interstate transport. See GenOn, 722 F.3d at 520-23. However, the commenters misread the court's holding regarding the EPA's interpretation of the interplay between the two provisions. The Third Circuit spoke to the question of the *timing and sequence* of these processes—specifically, whether the EPA could act on a CAA section 126(b) petition in instances where the Agency had not yet acted on a CAA section 110 SIP addressing interstate transport for the same NAAQS. The Third Circuit also cited to a similar holding by the D.C. Circuit in Appalachian Power. Appalachian Power, 249 F.3d at 1047. Both courts upheld the EPA's position that it need not wait for the CAA section 110 process to conclude before acting on a CAA section 126(b) petition, thus affirming that both statutory provisions are independent from one another from a timing perspective. But neither court held that the EPA was precluded from applying the same analytical framework to resolving

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CAA section 126(b) petitions as it applies to analyze states' good neighbor obligations. Here, the Agency has not deferred action on New York's petition regarding the 2015 ozone NAAQS, for which good neighbor SIPs were due on October 1, 2018, until its action on the good neighbor SIPs (for the named upwind states) has concluded. Therefore, by acting on New York's CAA section 126(b) petition regarding the 2015 ozone NAAQS before concluding action on CAA section 110 SIPs, the EPA believes it has given CAA section 126(b) independent meaning as intended by Congress and the courts.

Moreover, the D.C. Circuit's opinion in *Appalachian Power* further supports the EPA's interpretation taken in this action: that while the Agency need not wait for the CAA section 110 process to conclude before acting on a CAA section 126(b) petition, the EPA reasonably imported the four-step interstate transport framework under CAA section 110 to CAA section 126 by interpreting the substantive requirements of the two provisions to be closely linked. The court in *Appalachian Power* specifically considered whether it was appropriate for the EPA to rely on findings made under the good neighbor provision in the NO_X SIP Call rulemaking in granting several CAA section 126(b) petitions raising similar interstate transport concerns with regards to the same NAAQS. Petitioners in that case argued that the EPA should instead make a finding that "the specified stationary sources within a given state *independently* met [the statute's] threshold test for effect on downwind nonattainment." 249 F.3d at 1049. The court

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found that by referring to stationary sources that emit pollutants "in violation of the prohibition of [CAA section 110(a)(2)(D)(i)]," Congress "clearly hinged the meaning of [CAA] section 126 on that of section 110(a)(2)(D)(i)." *Id.* at 1050. The court, therefore, concluded that given CAA section 126's silence on what it means for a stationary source to violate CAA section 110(a)(2)(D)(i), the EPA's approach of relying on findings under CAA section 110(a)(2)(D)(i) was reasonable and, therefore, entitled to deference under *Chevron*, 467 U.S. at 843 . *See Appalachian Power*, 249 F.3d at 1050. The EPA's approach to addressing New York's CAA section 126(b) petition through the application of the four-step interstate transport framework and consideration of findings made in the CSAPR Update and the Determination Rule is therefore reasonable and consistent with prior case law.

Several commenters assert that the EPA cannot rely on recent regional transport rulemakings because they did not fully address good neighbor obligations. Commenters assert that the existence of the CSAPR Update does not foreclose a state from seeking—or the EPA from providing—redress under CAA section 126(b) when the state finds itself struggling to meet NAAQS due to significant upwind contributions or interference. When the EPA promulgated the CSAPR Update it explicitly noted that it only served as a "partial remedy" as to the 2008 ozone NAAQS. Commenters argue that the fact that New York is continuing to experience challenges attaining the 2008 ozone NAAQS demonstrates that significant interstate pollution and

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associated attainment difficulties remain after the implementation of the CSAPR Update. Commenters therefore assert that the EPA's reliance on the Determination Rule as a complete remedy with respect to the 2008 ozone NAAQS is arbitrary and capricious because the rule fails to eliminate current and ongoing significant contributions by upwind states and sources.

The EPA agrees that the existence of the CSAPR Update does not foreclose redress under CAA section 126(b), but the commenters misstate the EPA's basis for evaluating the petition in light of the CSAPR Update. Although the EPA explained in the proposal that the Determination Rule concluded that the emissions reductions required by the CSAPR Update would fully address covered states' good neighbor obligations for the 2008 ozone NAAQS, the EPA did not rely on these rules (*i.e.*, the CSAPR Update and the Determination Rule) alone to propose denial of the petition.³⁵ Rather, as described in more detail in Section III.C below, the EPA has reviewed the petition consistent with its interpretation of CAA section 126(b) and the good neighbor provision to see if additional information that was not previously considered by the EPA in either the CSAPR Update or the Determination Rule would justify imposing the additional control requirements that New York requested. As described in Section III.C, the EPA specifically considered the relevance of current air quality in New York. However, based on its

³⁵ Similar to Kentucky, the EPA did not rely on its approval of the state's SIP alone to propose denial as to the sources named in that state but considered whether the petition raised new information not previously considered in that action. Page 58 of 171

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evaluation of the information provided in the petition, the EPA has found that the petitioner has not satisfied its burden to demonstrate that the sources named in the petition emit or would emit in violation of the good neighbor provision with respect to either the 2008 or 2015 ozone NAAQS.

C. The EPA's Evaluation of Whether the Petition Is Sufficient to Support a CAA Section 126(b) Finding

This section discusses the approach that the EPA used to review the sufficiency of New York's CAA section 126(b) petition and the EPA's resulting determination that New York has not provided an adequate technical and analytic basis for the EPA to make a finding nor does the EPA have available information to support such a finding.

Consistent with the EPA's approach to evaluating several prior CAA section 126(b) petitions, the EPA interprets CAA section 126(b) as placing an burden on the petitioner to establish a technical and analytic basis for the specific finding requested. Thus, the EPA first looks to see if the petition identifies or contains a sufficient basis to make the requested finding. *See, e.g.*, 76 FR 19662, 19666 (April 7, 2011) (proposed response to petition from New Jersey regarding SO₂ emissions from the Portland Generating Station); 83 FR 16064, 16070 (April 13, 2018) (final response to petition from Connecticut regarding ozone emissions from the Brunner Island Steam Electric Station); 83 FR 50444, 50452 (October 5, 2018) (final response to petitions

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from Delaware and Maryland regarding ozone emissions from four EGU facilities and 36 individual EGUs, respectively).³⁶

While the EPA interprets CAA section 126(b) as putting the burden on the petitioner, rather than the EPA, to provide a basis or justification for making the requested finding, nothing precludes the EPA from choosing to conduct an independent analysis on a discretionary basis when the Agency determines it would be helpful in evaluating a petition. The EPA has chosen to invoke its discretion in prior actions on CAA section 126(b) petitions concerning ozone, primarily where the Agency already had technical data or findings it could rely on as part of its independent analysis. Notably, because the supplemental information already existed at the time the EPA acted on those petitions, the EPA could leverage such information in its action without undertaking new analyses that would naturally take significantly more time and resources to develop.³⁷ Consistent with this position and as described further in this section of the notice, the EPA is using supplemental information, when currently available, as part of its discretionary independent analysis of New York's CAA section 126(b) petition. The results of the following analysis support the EPA's determination that New York has not provided an adequate technical and analytic basis for the EPA to make a finding, nor does the EPA's analysis of supplemental

 ³⁶ The EPA's response to the Maryland and Delaware petition is currently subject to judicial review in the D.C. Circuit. *Maryland v. EPA*, No. 18–1285 (D.C. Cir. filed October 15, 2018).
 ³⁷ See 83 FR 16064 (April 13, 2018); 83 FR 50444 (October 5, 2018). Page 60 of 171

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information available to it outside of the basis that New York has provided support such a finding.

1. The EPA's evaluation of New York's petition considering step 1

As discussed in Section IV.B.1 of the proposal, with respect to step 1 of the four-step interstate transport framework, the EPA began by evaluating New York's petition to determine whether the state identified a downwind air quality problem (nonattainment or maintenance) that may be impacted by ozone transport from other states. The EPA conducted this evaluation for Chautauqua County and the NYMA regarding both the 2008 and 2015 ozone NAAQS.

As discussed in Section II.C of this notice, the EPA typically focuses its analysis regarding potential downwind air quality problems on a future analytic year given the forward-looking nature of the good neighbor obligation in CAA section 110(a)(2)(D)(i)(I). The good neighbor provision requires that states prohibit emissions that "will" significantly contribute to nonattainment or interfere with maintenance of the NAAQS in any other state. The EPA reasonably interprets this language as permitting states and the EPA in implementing the good neighbor provision to prospectively evaluate downwind air quality problems and the need for further upwind emissions reductions.

Particularly relevant to this action, the EPA also applied this interpretation of "will" in the Determination Rule to evaluate remaining good neighbor obligations with respect to the 2008

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ozone NAAOS for the CSAPR Update states, including the nine upwind states cited in New York's petition. 83 FR 65889-90. As explained in that action, a key decision informing the application of the interstate transport framework is the selection of a future analytic year. Several court decisions have guided the factors that the EPA considers in selecting an appropriate future analytic year for such an analysis. First, in North Carolina, the D.C. Circuit held that the timeframe for implementation of emissions reductions required by the good neighbor provision should be selected by considering the relevant attainment dates of downwind nonattainment areas affected by interstate transport of air pollution. 531 F.3d at 911–12. Moreover, the Supreme Court and the D.C. Circuit have both held that the EPA may not over-control upwind state emissions relative to the downwind air quality problems. Specifically, the courts found that the Agency may not require emissions reductions (at steps 3 and 4 of the interstate transport framework) from a state that are greater than necessary to achieve attainment and maintenance of the NAAQS in all the downwind areas to which that state is linked. See EME Homer City, 572 U.S. at 521-22; EME Homer City II, 795 F.3d at 127, 129-30 (on remand from the Supreme Court, finding ozone-season NOx budgets for ten states invalid because the EPA's modeling showed that the downwind air quality problems to which these states were linked would be resolved by the time the budgets would be implemented). These court decisions support the Agency's choice to use a future analytic year to help ensure that any emissions reductions that

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the EPA may require of sources in upwind states neither over- or under-control emissions with respect to the EPA's projections as to downwind air quality at the time by which that those controls could feasibly be implemented.

In the Determination Rule, the EPA established the appropriate future analytic year for purposes of assessing remaining interstate transport obligations for the 2008 ozone NAAQS. 83 FR 65889-890. The EPA's analysis considered two primary factors: (1) the applicable attainment dates for the 2008 ozone NAAQS; and (2) the timing to feasibly implement new NO_X control strategies not previously addressed in the CSAPR Update. As the applicable attainment dates, the EPA explained that the next attainment dates for the 2008 ozone NAAQS would be July 20, 2021, for nonattainment areas classified as Serious, and July 20, 2027, for nonattainment areas classified as Severe.

In the Determination Rule, the EPA then evaluated the timeframe necessary to implement additional NO_X control strategies at various sources across the region. 83 FR 65893-901. For EGUs, the EPA explained that it was appropriate to consider the timeframe required for implementation of selective catalytic reduction (SCR) across the region because of the potential for larger emissions reductions as compared to selective non-catalytic reduction (SNCR). The EPA determined that SCR project development and installation can require up to 39 months for

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an individual power plant installing controls on more than one boiler,³⁸ and that a minimum of 48 months (4 years) is a reasonable time-period needed to complete all necessary steps of SCR projects at EGUs on a regional scale, considering the necessary stages of post-combustion control project planning, shepherding of labor and material supply, installation, coordination of outages, testing, and operation. The EPA further concluded that SNCR installations, while generally having shorter project timeframes (*i.e.*, up to 16 months for an individual power plant installing controls on more than one boiler), share similar implementation steps with and need to account for the same regional factors as SCR installations.³⁹ The EPA, therefore, concluded that it may reasonably take up to 4 years to install the new emissions controls regionwide for EGUs.

The EPA further explained that many of the same considerations affecting the EPA's analysis of regionwide implementation of controls at EGUs would also affect the regionwide implementation of controls at non-EGUs, which may be more complex considering the diversity

³⁸ See Table 3–1 in Engineering and Economic Factors Affecting the Installation of Control Technologies for Multipollutant Strategies. EPA Final Report. EPA-600/R-02/073. October 2002. Available at

https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NRMRL&dirEntryId=63473. ³⁹ See the month-by-month evaluation of SNCR installation presented in Exhibit A-6 in Engineering and Economic Factors Affecting the Installation of Control Technologies for Multipollutant Strategies. EPA Final Report. EPA-600/R-02/073. October 2002. Available at *https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NRMRL&dirEntryId=63473.* Evaluation of implementation timeframes for various control strategies is also found in the EPA's CSAPR Update EGU NOx Mitigation Strategies Final Rule TSD. *See* Docket ID No. EPA-HQ-OAR-2015-0500 (available at *http://www.regulations.gov*). Page 64 of 171

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of non-EGU sources as well as the greater number and smaller size of the individual sources. 83 FR 65901-04. The EPA noted that preliminary estimates for the implementation of some potential control technologies on non-EGUs only account for the time between bid evaluation and startup but do not account for additional considerations such as pre-bid evaluation studies, permitting, and installation of monitoring equipment. In addition, these preliminary estimates for implementing control technologies do not include the time and resources needed to install such technologies on a sector- or region-wide basis. Accordingly, the EPA concluded that it was reasonable to assume for purposes of the Determination Rule that an expeditious timeframe for installing sector- or region-wide controls on non-EGU sources could also be 4 years or more.

Considering the timeframes for regionwide implementation of control strategies and the timeframe in which a rulemaking requiring such controls would be finalized, the EPA concluded that reductions from such control strategies were unlikely to be implemented for a full ozone season until 2023. The EPA acknowledged that 2023 is later than the attainment date for nonattainment areas classified as Serious (July 20, 2021), but concluded that it was unlikely emissions control requirements could be feasibly promulgated and implemented by that earlier date. Moreover, the EPA noted that 2023 was well in advance of the subsequent attainment date for areas classified as Severe. Accordingly, the EPA determined that 2023 was a reasonable year

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to assess downwind air quality to evaluate any remaining requirements under the good neighbor provision for the 2008 ozone NAAQS. 83 FR 65901-05.

After selecting the analytic year, the EPA then used the Comprehensive Air Quality

Model with Extensions (CAMx v6.40) to model emissions in 2011 and 2023, based on updates

provided to the EPA from states and other stakeholders on a January 6, 2017, Notice of Data

Availability (NODA).^{40,41} This updated modeling was used in the Determination Rule to estimate

ozone design values in 2023, as described in the Determination Rule Air Quality Modeling

⁴⁰ Using the 2023 analytic year also allowed the EPA to begin the updated analysis using the data sets originally developed for a January 2017 Notice of Data Availability (NODA) (82 FR 1733, January 6, 2017), which the EPA revised in response to stakeholder feedback. Accordingly, the EPA initiated its analysis more quickly than if a different year had been chosen, which might have delayed subsequent rulemaking actions and therefore emissions reductions.
⁴¹ See Notice of Availability of the Environmental Protection Agency's Preliminary Interstate Ozone Transport Modeling Data for the 2015 Ozone National Ambient Air Quality Standard (NAAQS), 82 FR 1733 (January 6, 2017). This memorandum also supplements the information provided in, "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)." Memorandum from Stephen D. Page, Director, U.S. EPA Office of Air Quality Planning and Standards, to Regional Air Division Directors, Regions 1–10. October 27, 2017. Available at https://www.epa.gov/sites/production/files/2017-10/documents/final_2008_o3_naaqs_transport_memo_10-27-17b.pdf.

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Technical Support Document (TSD).⁴² The EPA used outputs from the 2011 and 2023 model simulations to project base period 2009-2013 average and maximum ozone design values to 2023 at monitoring sites nationwide. In projecting future year design values, the EPA applied its own modeling guidance,⁴³ which recommends using model predictions from the "3 x 3" array of grid cells surrounding the location of the monitoring site.⁴⁴ Considering the comments on the January 2017 NODA and other analyses, the EPA also projected 2023 design values based on a modified version of the "3 x 3" approach for those monitoring sites located in coastal areas. Briefly, in this alternative approach, the EPA eliminated from the design value calculations those modeling data in grid cells that are dominated by water (*i.e.*, more than 50 percent of the area in the grid cell is water) and that do not contain a monitoring site (*i.e.*, if a grid cell is more than 50

⁴⁴ The EPA's modeling uses 12km² grid cells.

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⁴² Air Quality Modeling Technical Support Document for the Updated 2023 Projected Ozone Design Values. U.S. EPA Office of Air Quality Planning and Standards. June 2018. Document developed to support the Determination Rule, 83 FR 65878 (December 21,2018). Available at *https://www.epa.gov/airmarkets/air-quality-modeling-technical-support-document-updated-2023-projected-ozone-design*.

⁴³ "Draft Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, PM_{2.5}, and Regional Haze." Memorandum from Richard Wayland, Division Director, Air Quality Assessment Division, U.S. EPA Office of Air Quality Planning and Standards, to Regional Air Division Directors, Regions 1–10. December 3, 2014. Available at *https://www3.epa.gov/scram001/guidance/guide/Draft-O3-PM-RH-Modeling_Guidance-2014.pdf*.

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percent water but contains an air quality monitor, that cell would remain in the calculation).⁴⁵ For each individual monitoring site, the base period 2009-2013 average and maximum design values, and the 2023 projected average and maximum design values (based on both the "3 x 3" approach and the alternative approach) affecting coastal sites are available in Excel format in the docket for this action and in PDF format at *https://www.epa.gov/airmarkets/memo-supplemental-information-interstate-transport-sips-2008-ozone-naags*.

In the Determination Rule, the EPA followed the same approach for identifying receptors based on this modeling as in the CSAPR Update rulemaking process. That is, the EPA considered a combination of modeling projections and monitoring data to identify receptor sites that are projected to have problems attaining or maintaining the NAAQS.⁴⁶ Specifically, the EPA identified nonattainment receptors as those monitoring sites with current measured values exceeding the NAAQS that also have projected (*i.e.*, in 2023) average design values exceeding the NAAQS. The EPA also identified maintenance receptors as those monitoring sites with

⁴⁵ A model grid cell is identified as a "water" cell if more than 50 percent of the grid cell is water based on the 2006 National Land Cover Database. Grid cells that meet this criterion are treated as entirely over water in the WRF modeling used to develop the 2011 meteorology for the EPA's air quality modeling. (*See* Air Quality Modeling Technical Support Document for the Updated 2023 Projected Ozone Design Values. U.S. EPA Office of Air Quality Planning and Standards. June 2018. Document developed to support the Determination Rule, 83 FR 65878 (December 21, 2018). Available at *https://www.epa.gov/airmarkets/air-quality-modeling-technical-support-document-updated-2023-projected-ozone-design*.)
⁴⁶ See 81 FR 74530-74532 (October 26, 2016).

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projected maximum design values exceeding the NAAQS. Specifically, maintenance receptors included sites with current measured values below the NAAQS with projected average and maximum design values exceeding the NAAQS and monitoring sites with projected average design values below the NAAQS but with projected maximum design values exceeding the NAAQS.

Pertinent to this action, the EPA's examination in the Determination Rule of the 2023 projected design values for Chautauqua County indicates that this area is not projected to be in nonattainment or have a maintenance problem in 2023 for either the 2008 or the 2015 ozone NAAQS. The EPA's examination of the 2023 projected design values for the NYMA indicates that this area is not projected to be in nonattainment or have a maintenance problem in 2023 for either the 2008 ozone NAAQS. However, the EPA's modeling indicates that the NYMA is projected to be in nonattainment in 2023 with respect to the 2015 ozone NAAQS.

Because the EPA has already conducted a rulemaking evaluating good neighbor obligations for the 2008 ozone NAAQS under CAA section 110(a)(2)(D)(i)(I) in which the Agency used 2023 as the future analytic year and because, as discussed previously, CAA section 126(b) directly incorporates the CAA section 110(a)(2)(D)(i) standard, the EPA believes it is also appropriate to consider the 2023 modeling conducted for the Determination Rule in evaluating whether New York's petition has adequately demonstrated that there will be a

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downwind air quality problem with respect to the 2008 ozone NAAQS in Chautauqua County and the NYMA⁴⁷. Moreover, the EPA believes it is appropriate to consider the 2023 modeling when evaluating the petition's claims with respect to the 2015 ozone NAAQS because the 2023 ozone season aligns with the attainment year for the 2015 NAAQS in Moderate ozone nonattainment areas, consistent with the D.C. Circuit's instruction in *North Carolina*.⁴⁸ As explained at proposal, while the EPA is not in this action reopening the analysis and findings made in the Determination Rule with respect to the 2008 ozone NAAQS, the EPA evaluated the petition, consistent with the standard of review described in Section III.B, to determine whether additional information not considered in the Determination Rule should influence the EPA's finding as to whether the sources named in New York's petition emit or would emit in violation of the prohibition of CAA section 110(a)(2)(D)(i)(I).

The New York petition raises concerns about the assumptions and results of the EPA's modeling. Specifically, the petition indicates significant concerns with the EPA's expectation that uncontrolled EGUs will reduce their emissions rates in the absence of unit-level enforceable limits and with the EPA's treatment of model cells containing a land/water interface. The

⁴⁷ See n.1, supra, regarding the potential impact on this final action of the September 13, 2019, decision of the D.C. Circuit in *Wisconsin v. EPA*, No. 16-1406.

⁴⁸ The 2023 ozone season represents the last full season from which data can be used to determine attainment with the 2015 ozone NAAQS by the August 3, 2024, attainment date for nonattainment areas classified as Moderate.

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petition does not further elaborate on the basis for these concerns, and the EPA, therefore, has no reason to believe that its 2023 modeling is unreliable. Moreover, the EPA already addressed concerns regarding the EGU assumptions in the 2023 modeling in response to comments raised in the Determination Rule. *See* 83 FR 65886-89 (explaining statutory rationale regarding when enforceable emissions limitations are required and responding to comments); 83 FR 65913-15 (responding to comments concerning projections of EGU emissions in 2023).⁴⁹

As described earlier in this section, the EPA also addressed concerns regarding the treatment of model cells containing land/water interface in the Determination Rule by calculating design values using two different methodologies. 83 FR 65917. The petition does not provide any new information not already considered by the EPA in the Determination Rule as to these issues and therefore, the EPA has no basis to reconsider its conclusions finalized in that action.

The EPA received several comments challenging the conclusion that it is appropriate to evaluate air quality in a future year to determine whether there is a violation of the good neighbor provision in evaluating New York's CAA section 126(b) petition. First, the EPA received comments asserting that the EPA's reliance on the term "will" as it appears in the good neighbor provision to justify consideration of air quality in a future year is inconsistent with the

⁴⁹ The EPA's conclusions regarding the EGU assumptions in the 2023 modeling are also the subject of judicial review in the D.C. Circuit. *New York v. EPA*, No. 19–1019 (D.C. Cir.). Page 71 of 171

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plain language of the CAA. Commenters contend that Congress specified that implementation plans under CAA section 110(a)(2)(D)(i) must prohibit "any" pollution from "any" source that will contribute significantly to nonattainment and interfere with maintenance, and that this includes pollution that will do so between now and 2023.

The EPA does not agree that analysis of air quality in a future year is inconsistent with the statute. The EPA reasonably interprets the word "will" in the good neighbor provision as permitting states and the EPA in implementing the good neighbor provision to prospectively evaluate downwind air quality problems and the need for further upwind emissions reductions. In the EPA's prior regional transport rulemakings, the Agency has routinely evaluated whether upwind states "will" significantly contribute to nonattainment or interfere with maintenance based on projections of air quality in the future year in which any emissions reductions would be expected to go into effect. For the 1998 NO_X SIP Call, the EPA used an analytic year of 2007. For the 2005 CAIR, the Agency used analytic years of 2009 and 2010 for ozone and PM_{2.5}, respectively. 63 FR 57450; 70 FR 25241. The EPA applied the same approach in finalizing CSAPR in 2011, the CSAPR Update in 2016, and the Determination Rule in 2018 by evaluating air quality in 2012, 2017 and 2023, respectively. 76 FR 48211; 81 FR 74537.

The D.C. Circuit affirmed the EPA's interpretation of "will" in CAIR, finding the EPA's consideration of future projected air quality (in addition to current measured data) to be a

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reasonable interpretation of an ambiguous term. *North Carolina*, 531 F.3d at 913–14. The *North Carolina* court affirmed the EPA's interpretation, explaining that "will" "can mean either certainty or indicate the future tense" and held that it is reasonable for the EPA to give effect to both potential meanings of the word. *Id.* Thus, although the court acknowledged that the term "will" could refer to the certainty of an upwind state's impact on a downwind state (*i.e.*, based on current measured nonattainment), the court also clearly acknowledged the ambiguity of this term and indicated this was not the only reasonable interpretation. Given this ambiguity, the D.C. Circuit affirmed that the EPA's approach is permissible under the Act.

While the EPA agrees that the references to "any" in CAA section 110(a)(2)(D)(i) mean that any source of emissions of any air pollutant having the requisite impact may be subject to control under that provision, the commenter does not explain how this term limits the EPA's discretion to evaluate of future air quality when evaluating whether such emissions have the requisite impact on downwind areas and therefore whether such control is necessary or authorized. Rather, as the commenter fails to acknowledge, the EPA is only authorized under the good neighbor provision to require the prohibition of such emissions in "amounts which will" improperly impact another state with respect to the NAAQS. The Supreme Court has held that this language means that any emissions reductions imposed under the good neighbor provision be no greater than necessary to address downwind NAAQS, *i.e.*, that the EPA avoid unnecessary

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over-control of emissions from upwind states. *See EME Homer City*, 572 U.S. at 521-22. In interpreting that decision, the D.C. Circuit declared the EPA's emissions reduction requirements for certain states to be invalid under the good neighbor provision where the EPA had information indicating that there will be no downwind air quality problems by the time the emissions reductions would have been implemented. *See EME Homer City II*, 795 F.3d at 130. Thus, the EPA does not agree that it is obligated to impose emissions reductions if there will be no downwind air quality issues to address by the time such reductions could be in place.

Several commenters contend that, by evaluating air quality in a future year the EPA fails to give "emits" in the phrase "emits or would emit" under CAA section 126(b) independent meaning, thereby unreasonably ignoring existing air quality issues in evaluating CAA section 126(b) petitions. Commenters contend that the provision is intended to provide relief for both current and future attainment and maintenance problems, with one commenter noting that the "or" conjunction indicates that the criteria for demonstrating a violation could be fulfilled either through current or future conditions. Thus, the commenters conclude that it is inappropriate for the EPA to rely on the word "will" in the good neighbor provision to base its analysis on future air quality without considering current conditions.

One commenter further asserts that the EPA's forward-looking approach to interpreting the requirements of CAA section 126(b) is inconsistent with its prior grant of a CAA section

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126(b) petition from New Jersey, which was based on the named source's current and ongoing emissions.⁵⁰ The commenter cites the Third Circuit's decision which upheld the EPA's action on the petition in *GenOn*, indicating that the court noted, in construing the timing provisions of CAA section 126 "that a statute ought, upon the whole, to be so construed that, if it can be prevented, no clause, sentence, or word shall be superfluous, void, or insignificant." 722 F.3d 513, 520-21 (3d Cir. 2013) (quoting *TRW Inc. v. Andrews*, 122 S. Ct. 441 (2001)).

The EPA agrees it must give meaning to the statutory terms of CAA section 126(b) and has done so here. As an initial matter, certain commenters misconstrue the EPA's forwardlooking evaluation of air quality impacts under CAA section 126(b) as stemming from the phrase "would emit" under this provision. As described in this section, the EPA looks to future *air quality* impacts under CAA section 126(b) because of the future-looking reference in the word "will" under the good neighbor provision, a violation of which is the explicit condition precedent for making the requested finding under CAA section 126(b). As explained in the EPA's prior actions under CAA section 126(b), the EPA reasonably interprets the terms "emits or would

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⁵⁰ Final Response to Petition from New Jersey Regarding SO₂ Emissions From the Portland Generating Station, 76 FR 69052 (November 7, 2011) (finding facility in violation of the prohibitions of CAA section 110(a)(2)(D)(i)(I) with respect to the 2010 SO₂ NAAQS prior to issuance of designations for that standard).

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emit" as referring to the *named source or sources' operating conditions*, not air quality.⁵¹ The EPA interprets the term "emits" as referring to a source's current emissions levels and "would emit" as referring to a source's reasonably anticipated future emissions levels. Accordingly, the EPA has given "emits" meaning independent from "would emit" by reasonably interpreting the terms as referring to the current and future operating conditions of the source or sources named in a CAA section 126(b) petition.

Contrary to the commenters' contention, the "emits" language is not in conflict with the incorporation of the term "will" as the standard for reviewing CAA section 126(b) petitions. Consistent with prior actions under CAA section 110(a)(2)(D)(i)(I), the EPA evaluates at step 1 of its analysis whether the downwind area in question will have an air quality problem in a relevant future year and at step 2 whether emissions from the upwind state in which the named source is located will impact the downwind area such that sources in the state should be subject to further analysis in step 3. If the EPA determines that the state will be linked to a downwind air quality problem in a relevant future year, it is in step 3 that the EPA evaluates the sources' emissions and operating conditions to determine whether the source named in the petition can and should be subject to control, and thus found to significantly contribute to nonattainment or

⁵¹ See Response to June 1, 2016 Clean Air Act Section 126(b) Petition from Connecticut, Final Action, 83 FR 16070 (April 13, 2018); Response to Clean Air Act Section 126(b) Petitions from Delaware and Maryland, Final Action, 83 FR 50453 (October 5, 2018). Page 76 of 171

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interfere with maintenance of the NAAQS downwind. Thus, the EPA's interpretation reasonably gives meaning to *both* the term "will" as incorporated into CAA section 126(b) and the "emits or would emit" clause in the context of the four-step interstate transport framework. Commenters' interpretation reads "will" out of the good neighbor provision and would require the EPA to interpret the "prohibition" of CAA section 110(a)(2)(D)(i)(I) in two contrary ways depending on the statutory process – as future-looking in a CAA section 110 analysis and limited to current conditions in a CAA section 126 analysis – despite the fact that CAA section 126(b) directly incorporates the terms of the good neighbor provision. The EPA does not agree that this would be a reasonable interpretation of the statutory provisions; at minimum, the EPA believes its interpretation is reasonable.

The EPA applied its same interpretation in acting on New Jersey's CAA section 126(b) petition for the Portland Generating Station, which was addressed in the Third Circuit's *GenOn* decision and which commenters incorrectly characterize as contrary to the EPA's interpretation here. In the EPA's proposed action on that petition, the EPA stated that it "interprets the term 'emits or would emit' as a reference to the source's current and potential future emissions.... For the emissions the source 'would emit' (*i.e.*, its potential future emissions), it is appropriate to consider the level at which the source could emit given the existing constraints on its emissions...." 76 FR 19671. The EPA's treatment of New Jersey's petition with respect to

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current nonattainment is also not inconsistent with its forward-looking evaluation of New York's petition under step 1. The EPA's action on New Jersey's petition found that the named source alone caused downwind violations of the relevant SO₂ NAAOS, and that the modeled magnitudes of those violations were seven times the NAAQS. 76 FR 69057. Ambient SO2 concentrations mostly vary only depending on a specific source's operation, and to the extent a source is consistently operating the same way over time, the SO₂ impacts from that source are anticipated to remain the same.⁵² There was no indication that the future operation of the source named in New Jersey's petition would change in the absence of emissions limits, so it was unnecessary for the EPA to evaluate the source's expected downwind impact on the SO₂ NAAQS in New Jersey in a future year as the result would have likely been the same. The historic variability of ozone is often influenced by meteorology and other factors, which can affect the magnitude of impact on downwind air quality from year to year. See CSAPR Update, 81 FR 74504, 74513-14 (October 26, 2016) (discussing observational studies regarding the nature of ozone transport). Moreover, given the numerous sources impacting downwind ozone concentrations and the general trend in decreasing NOx emissions, current air quality is often not

⁵² See, e.g., Data Requirements Rule for the 2010 SO₂ NAAQS, 80 FR 51057 (explaining that peak concentrations of SO₂ are commonly because of one or a few sources, peak concentrations are typically near the source, and SO₂ is not the result of complex atmospheric chemical reactions unlike ozone).

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indicative of air quality in a future year. Thus, current conditions do not necessarily indicate whether there will be an ozone transport problem in a future year.

Several commenters assert that the EPA may not rely on the 2023 modeling to evaluate future air quality in assessing New York's petition because it does not align with the appropriate attainment dates, and in particular, the 2021 Serious area attainment date for the 2008 ozone NAAQS applicable to the NYMA. Commenters contend that the D.C. Circuit has found that the statute unambiguously requires compliance with NAAOS attainment deadlines, based on the statutory requirement that implementing provisions be "consistent" with Title I of the CAA. North Carolina v. EPA, 531 F.3d 896, 911-12 (D.C. Cir. 2008). Commenters therefore contend that the timing of good neighbor obligations must be directly tied to actual attainment dates, not to a date that merely "considers" such dates. Commenters cite the D.C. Circuit opinion in *Natural Resources Defense Council v. EPA*, evaluating an attempt by the EPA to extend 2008 ozone NAAQS compliance deadlines for several months, to include the 2018 ozone season. 777 F.3d 456, 458-59 (D.C. Cir. 2014) (NRDC). The court rejected this delay as "untethered to Congress' approach" and held that the EPA was required to adhere to the 1997 ozone NAAQS attainment timeline set by the 1990 Clean Air Act amendments, plumbed to the date of attainment designations. Id. at 469.

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The EPA disagrees that it is inappropriate to rely on the 2023 modeling because it does not align with a particular attainment date. As an initial matter, even assuming that a year aligned with the Serious area attainment date could be an appropriate analytic year for the EPA to consider in evaluating future air quality in New York, the commenters have not submitted any information that indicates there will be an air quality problem under the 2008 ozone NAAQS in New York by the Serious area attainment year of 2021, nor did the petition provide any. As discussed in Section III.C of this notice, the petitioner bears the burden of establishing a technical basis for the specific finding requested and has not done so here. The projected ozone design values for 2023 represent the best available data regarding expected air quality in New York in any future year. These data were developed over the course of multiple years of analytic work, reflecting extensive stakeholder feedback and the latest emissions inventory updates. The EPA assembled an emissions inventory, performed air quality analytics in 2016 and released corresponding data and findings in the January 2017 NODA. Subsequent to stakeholder feedback on the NODA, the EPA was able to further update its emissions inventories and air quality modeling and release results for the 2023 future analytic year in October 2017. The EPA has no comparable data available for earlier analytic years between 2017 and 2023 that have been through an equally rigorous analytic and stakeholder review process, and, thus, the 2023 data are the best data currently available for the EPA to evaluate New York's claims.

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Moreover, to the extent the commenters are challenging the EPA's basis for selecting 2023 as an analytic year to assess good neighbor obligations for the 2008 ozone NAAQS in prior rulemaking actions, such claims are not properly raised in this rulemaking action. As noted earlier in this discussion, the EPA solicited and received public comments regarding the bases for selecting the 2023 analytic year in the Determination Rule, including the EPA's consideration of attainment dates. That action is currently subject to judicial review in the D.C. Circuit, *New York v. EPA*, No. 19–1019 (D.C. Cir.). The EPA did not, in this action, reopen for public comment the analyses and findings made in the Determination Rule. Rather, the EPA evaluated New York's petition to determine whether additional information not considered in the Determination Rule should influence the EPA's finding as to whether the sources named in New York's petition emit or would emit in violation of the prohibition of CAA section 110(a)(2)(D)(i)(I). Accordingly, comments regarding the EPA's decision to analyze air quality in 2023 in the Determination Rule are not within the scope of this action. ⁵³

⁵³ The EPA similarly solicited and received public comment on the use of a 2023 analytic year in acting on Kentucky's SIP submission, which was based on a similar evaluation as that used in the Determination Rule. 83 FR 33730 (July 17, 2018). No legal challenges to the EPA's determinations in that SIP action were filed within the period for judicial review, and comments regarding the appropriateness of selecting a 2023 analytic year in that action are similarly outside the scope of this rulemaking.

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Nonetheless, the EPA does not agree that either the text of the statute or the court's holding in *North Carolina* dictates that a future analytic year evaluated under the good neighbor provision must be identical to the next attainment deadline. The EPA selected a 2023 analytic year for purposes of evaluating remaining good neighbor obligations for the 2008 ozone NAAQS in the Determination Rule considering both relevant future attainment dates and the anticipated timeframe for implementation of additional emissions reductions across the fleet in the region of states being analyzed. For the reasons explained below, consideration of these two factors is consistent with the statute.

First, as to the statute, the good neighbor provision does not set forth any timeframe for the analysis of downwind air quality or the implementation of upwind emissions reductions. On its face, the good neighbor provision is therefore ambiguous as to when the upwind emissions reductions it calls for must be in place. The EPA acknowledges that the good neighbor provision does indicate that the prohibition of upwind state emissions must be "consistent with the provisions of [title I]," and that the D.C. Circuit held in its *North Carolina* decision that the other provisions with which the implementation of the good neighbor provision must be consistent include the attainment dates in part D of title I of the Act. However, the good neighbor provision does not specify what it means to be "consistent with" the other provisions of the Act, and courts have routinely held that this phrase is ambiguous. *See, e.g., EDF v. EPA*, 82 F.3d 451, 457 (D.C.

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Cir. 1996) (holding the requirement that implementation of transportation control measures be "consistent with" the applicable implementation plan under section 176 of the CAA is "flexible statutory language," which does not require "exact correspondence...but only congruity or compatibility," thus requiring a court to defer to reasonable Agency determinations); *Natural Resources Defense Council v. Daley*, 209 F.3d 747, 754 (D.C. Cir. 2000) (finding that statute requiring fishing quotas be "consistent with" a fishery management plan was ambiguous); *NL Indus. v. Kaplan*, 792 F.2d 896, 898–99 (9th Cir. 1986) (statutory phrase "consistent with the national contingency plan" in 42 U.S.C. 9607(a)(2)(B) "does not necessitate strict compliance with [national contingency plan"s] provisions"). Moreover, while CAA section 181 identifies timeframes for attaining ozone standards in downwind states, it does not specify deadlines for good neighbor emissions reductions in upwind states.⁵⁴ Therefore, Congress has left a gap for the EPA to fill. *See Chevron*, 467 U.S. at 843. In light of this ambiguity, the good neighbor provision cannot be read to require implementation of upwind emissions reductions on a specific timeframe, and an analytic year used to evaluate potential obligations under the good neighbor

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⁵⁴ It is worth noting that the statutory text of CAA section 181(a) does not itself establish the attainment dates for the 2008 or 2015 ozone NAAQS. Rather, the EPA undertakes rulemakings to establish the appropriate deadlines after a new or revised ozone NAAQS is promulgated. *See, e.g.*, 2008 Ozone NAAQS SIP Requirements Rule, 80 FR 12264, 12268 (March 6, 2015); 40 CFR 51.1103 and Implementation of the 2015 National Ambient Air Quality Standards for Ozone: Nonattainment Area Classifications Approach, Final Rule, 83 FR 10380 (March 9, 2018); 40 CFR 51.1303.

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provision should be considered reasonable provided the EPA has demonstrated that the selected analytic year is chosen with consideration paid to, and is not inconsistent with, downwind attainment dates and other relevant attainment planning requirements in title I of the Act.

Moreover, the statute does not impose inflexible deadlines for attainment. The general planning requirements that apply to nonattainment areas under subpart 1 of part D provide that the Administrator may extend the default 5-year attainment date by up to 10 years "considering the severity of nonattainment and the availability and feasibility of pollution control measures." CAA section 172(a)(2)(A). In the case of the ozone NAAQS, this provision is overridden by the more specific attainment date provisions of subpart 2. The general timeframes provided for attainment in ozone nonattainment areas in the CAA section 181(a)(1) table may be (and often are) modified pursuant to other provisions in CAA section 182, considering factors such as measured ozone concentrations and the feasibility of implementing additional emissions reductions. For example, the 6-year timeframe for attainment of the 2008 ozone NAAOS in Moderate areas (the July 2018 attainment date) could be extended under certain circumstances to 2020, pursuant to CAA section 181(a)(5). And pursuant to CAA section 181(b)(2), when downwind areas are unable to implement sufficient reductions via feasible control technologies by one attainment date, those areas will be reclassified, or "bumped up" in classification, and given a new attainment date with additional time to attain. With reclassification, the date for an

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area to attain the 2008 ozone NAAQS could be extended to 2021, 2027 and 2032, for areas classified as Serious, Severe and Extreme, respectively. Each of these deadlines could be subject to further extensions of up to 2 years pursuant to CAA section 181(a)(5). Part D further defines what control strategies states must implement by sources in nonattainment areas by each of the applicable attainment dates, incorporating considerations of technological feasibility at each stage. *See, e.g.*, CAA section 172(c)(1), (2) (requiring implementation of reasonably available control measures and reasonable further progress in designated nonattainment areas); CAA section 182(b)(1)(A), (c)(2)(B) (setting explicit reasonable further progress targets for ozone precursors, and providing an exception when the SIP includes "all measures that can feasibly be implemented in the area, in light of technological achievability").

Thus, while the statute indicates that downwind areas should attain as expeditiously as practicable, but no later than the attainment dates specified in CAA sections 172(a)(2) and 181(a)(1), implementation provisions for nonattainment planning lay out myriad exceptions to those deadlines, including for circumstances when attainment is simply infeasible. *See Whitman v. Am. Trucking Ass'ns, Inc.*, 531 U.S. 457, 493–94 (2001) (Breyer, J., concurring) (considerations of costs and technological feasibility may affect deadlines established for attainment in specific areas). The EPA's approach to evaluating upwind emissions reductions based on technological feasibility is consistent with the requirements imposed on downwind

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nonattainment areas required to implement certain "reasonable" controls within the targeted timeframe.

The EPA further disagrees with the comment asserting that the D.C. Circuit's North Carolina decision requires the EPA to only use the next relevant attainment date in selecting its future analytic year. The North Carolina decision faulted the EPA for not considering upcoming attainment dates in downwind states when setting compliance deadlines for upwind emissions reductions in CAIR, where the EPA had evaluated only the feasibility of implementing upwind controls. 531 F.3d at 911–12. But the court did not hold that the CAA requires that compliance deadlines for good neighbor emissions reductions (and thus, the future analytic year) be identical to a specific attainment date in downwind areas, let alone the next upcoming date. Nor did the court opine that the EPA would never be justified in setting compliance dates that fall after the next upcoming downwind attainment date or that are based, in part, on the feasibility of implementing upwind emissions reductions. Indeed, in remanding the rule, the D.C. Circuit acknowledged that upwind compliance dates may, in some circumstances, come after attainment dates. Id. at 930 (where the attainment date relevant to the discussion was 2010, instructing the EPA to "decide what date, whether 2015 or earlier, is as expeditious as practicable for states to eliminate their significant contributions to downwind nonattainment"). Accordingly, the EPA's

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consideration of anticipated compliance timeframes for implementation of NO_X control strategies in selecting a future analytic year is not inconsistent with *North Carolina*.

Nor did the court speak to the timeframe for either analysis or compliance with respect to the "interfere with maintenance" clause of the good neighbor provision. While the D.C. Circuit held that the EPA must give independent meaning to that clause, the court made clear that this obligation applies to the EPA's identification of downwind air quality problems that must be addressed by upwind states. 531 F.3d at 909-11. The court did not speak to the timeframe by which upwind states should be required to implement emissions reductions to address such areas. On the contrary, the ambiguity in the good neighbor provision regarding the relationship of upwind state emissions reductions to attainment dates is further heightened with respect to downwind areas that the EPA anticipates are likely to be in attainment)⁵⁵ but which may have problems maintaining the standard (or even designated attainment)⁵⁵ but which may have problems maintaining the standard in the future. For example, in the EPA's 2017 air quality modeling performed for the CSAPR Update, the EPA identified six nonattainment receptors and thirteen maintenance receptors. 81 FR 74533. The maintenance receptors were areas that the EPA expected were likely to be in attainment based either on the modeling projections or current

⁵⁵ For example, in the CSAPR Update, two maintenance receptors (in Allegan County, Michigan, and Jefferson County, Kentucky) were located in areas designated attainment for the 2008 ozone NAAQS. 40 CFR 81.318 (Kentucky), 81.323 (Michigan). Page 87 of 171

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monitored data, but which the EPA expected may have problems maintaining attainment of the standard under certain circumstances. While many of the maintenance receptors were in areas designated nonattainment, the EPA's analysis suggests that these areas will be able to demonstrate (and in many cases had in fact demonstrated) attainment of the NAAQS by the attainment date or otherwise receive a clean data determination that relieves the state of further planning obligations.⁵⁶ While the good neighbor provision requires states to prohibit emissions that will "interfere with maintenance" of the NAAQS in these areas, there is no deadline for maintenance of the standard comparable to an attainment date for downwind areas that are designated as nonattainment for a specific standard.

Likewise, the court's decision in the *NRDC* case raised by the commenter addressed only the limitations on the EPA's authority to set attainment dates for new or revised ozone NAAQS applicable to designated nonattainment areas. The court did not speak to the requirements imposed under the good neighbor provision or the applicability of the attainment dates in subpart 2 to any emissions reductions required under that provision in upwind states.

Regarding the EPA's selection of 2023 as the appropriate future analytic year in the Determination Rule, one commenter characterizes the EPA's determination that installing sector-

⁵⁶ See, e.g., 80 FR 30941 (June 1, 2015) (determination of attainment of Baltimore, MD (Harford receptor)); 81 FR 26697 (May 4, 2016) (determination of attainment by the attainment date of Cincinnati-Hamilton OH–KY–IN (Hamilton receptor)). Page 88 of 171

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or region-wide controls on non-EGU sources could be 4 years or more to be a "speculative and unsupported assumption." The commenter asserts that the EPA could have, but did not, examine the status of controls installed at the identified non-EGU sources and did not consider the specific timeframes needed for the installation of any additional controls, should they be required.

The EPA disagrees with the commenter's assertions related to the timeframe for the installation of controls at non-EGU sources identified in New York's petition. First, as noted previously, the EPA is relying on the 2023 modeling in this final action as the best available future-year data in the absence of any such data provided by the petitioner. Commenters had an opportunity to comment on the choice of the EPA's selected 2023 modeling year in the Determination Rule, which is already the subject of review in the D.C. Circuit. Thus, any comments regarding the bases for the EPA's selection of a 2023 analytic year in the Determination Rule (or in the EPA's similar action on Kentucky's SIP) are outside the scope of this action. Nonetheless, commenters here have not explained their assertion that the EPA's conclusions regarding the installation time for controls at non-EGUs are unsupported or indicated the type of information they believe is lacking to support those conclusions; thus, their allegation that the conclusions are "speculative" is conclusory and unfounded. The EPA further disagrees that it had any obligation to further investigate the status of non-EGU controls in acting

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on New York's petition. As discussed in Section III.C, the petitioner bears the burden of demonstrating that the finding sought in the petition is technically and analytically justified. The fact that the EPA has chosen to consider modeling data already available to further evaluate New York's petition does not shift the burden to the EPA to conduct yet further analysis where it was not provided by the petition.

Moreover, the commenters fail to acknowledge that the EPA's preliminary estimates of installation times did not capture all factors influencing the time needed to full implement controls at non-EGUs. As noted earlier in this section, preliminary estimates for the implementation of some potential control technologies on non-EGUs only account for the time between bid evaluation and startup but do not account for additional considerations such as prebid evaluation studies, permitting, and installation of monitoring equipment. Further, the EPA's preliminary estimates for implementing control technologies at non-EGU facilities do not account for the time and resources needed to install such technologies on a sector- or region-wide basis. Thus, the EPA has no reason to reconsider the installation timeframe for controls at non-EGUs identified in the Determination Rule, much less shorten that timeframe as suggested by the commenters.

Commenters further claim that the EPA's reliance on 2023, a date 4 years in the future, is inconsistent with the maximum 3-year period for remedies permitted under CAA section 126(c).

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Commenters point to the EPA's own statements in a prior CAA section 126 action that CAA section 126(c) establishes a maximum 3-year period for implementation of controls regardless of "the timing of attainment needs downwind." 64 FR at 28279.

The EPA disagrees with commenters' contention that the 3-year deadline for implementing a remedy under CAA section 126(c) suggests that the consideration of modeling data from a 2023 analytic year for purposes of evaluating New York's CAA section 126(b) petitions is inappropriate. As noted earlier, the EPA is considering the 2023 modeling data as the best available data regarding expected air quality in New York in any future year, in the absence of any analysis of future air quality for any other year provided by either the petition or commenters. Thus, although 2023 is beyond the 3 years provided for implementation of emissions limits under CAA section 126(c), the data help inform whether there may be an air quality problem relative to either the 2008 or 2015 ozone NAAQS going forward.

Moreover, the choice of 2023 as an analytic year does not preclude the implementation of a remedy in an earlier year, including within the 3-year deadline specified under CAA section 126(c), if the EPA identifies a future air quality problem and the necessary finding is made as to any sources named in New York's petition. However while CAA section 126 contemplates that a source or group of sources may be found to have interstate transport impacts, it cannot be determined whether such source or sources are in violation of the good neighbor provision and

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whether controls are justified without analyzing emissions from a range of sources influencing regional-scale ozone transport, including sources not named in the petitions. Analysis of a future year thus ensures that any emissions reductions the EPA may require under that provision are not in excess of what would be necessary to address downwind nonattainment and maintenance problems as they exist by the time any emissions limitations would be implemented. Thus, although the 2023 modeling does not necessarily align with the year in which emissions limitations might be implemented under CAA section 126(c), were the EPA to make a CAA section 126(b) finding, it represents the best available data regarding future ozone concentrations in New York. Therefore, the EPA's reasonable choice to rely on its existing 2023 air quality modeling for evaluating air quality does not conflict with CAA section 126(c), nor does it preclude implementation of a remedy at an earlier date if the requisite air quality impact is found.

Several commenters assert that the EPA cannot rely on the 2023 modeling to evaluate good neighbor obligations because it relies on unenforceable assumptions about sources' voluntary behavior. One commenter notes, for example, that the EPA relies on plant retirements and fuel switches to natural gas electricity generation, without any permit requirements or other emissions limits in place to ensure such changes remain in place in 2023. Commenters explain that SIPs are required to demonstrate compliance with a federal standard consistent with the attainment deadline and contain adopted control measures with enforceable emissions limits. By

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using projected emissions reductions that are not bound by enforceable measures in its step 1 analysis, the EPA holds itself to a different standard, allowing projected emissions reductions to stand in for actual enforceable reductions.

The EPA does not agree that its reliance on the 2023 modeling data is inappropriate or unreliable, even if it includes assumptions regarding likely future operating conditions at the sources. Rather, as explained below, the modeling provides a reasonable and likely conservative estimate of emissions and ozone concentrations in 2023, and thus it is both reasonable and consistent with the statute for the EPA to rely on the modeling in evaluating the claims in New York's petition.

The EPA disagrees that reliance on the 2023 modeling is inconsistent with the statutory requirements of the good neighbor provision because the modeling reflects emissions reductions that may not be subject to enforceable measures. The good neighbor provision instructs the EPA and states to apply its requirements "consistent with the provisions of" title I of the CAA. The EPA has therefore interpreted the requirements of the good neighbor provision, and the elements of its four-step interstate transport framework, to apply in a manner consistent with the designation and planning requirements in title I that apply in downwind states. *See North Carolina*, 531 F.3d at 912 (holding that the good neighbor provisions in title I). The EPA notes that this

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consistency instruction follows the requirement in the good neighbor provision that plans "contain adequate provisions prohibiting" certain emissions. The following paragraphs will therefore explain the EPA's interpretation of the circumstances under which the good neighbor provision requires that plans "prohibit" emissions through enforceable measures and show that this interpretation is consistent with the circumstances under which downwind states are required to implement emissions control measures in nonattainment areas.

For purposes of this analysis, the EPA notes specific aspects of the title I designations process and attainment planning requirements for the ozone NAAQS that provide relevant context for evaluating the consistency of the EPA's approach to implementing the good neighbor provision in upwind states. This discussion is not intended to suggest that the specific requirements of designations and attainment planning for downwind states apply to upwind states pursuant to the good neighbor provision, but rather to explain why the EPA's approach to interpreting the good neighbor provision is reasonable in light of relevant, analogous provisions found elsewhere in title I. *Cf. EDF v. EPA*, 82 F.3d 451, 457 (D.C. Cir. 1996) (per curiam) (describing the phrase "consistent with" as "flexible statutory language" which does not require "exact correspondence . . . but only congruity or compatibility," thus requiring a court to defer to reasonable Agency determinations), *amended by* 92 F.3d 1209 (D.C. Cir. 1996). These provisions demonstrate that the EPA's good neighbor approach is consistent with other relevant

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provisions of title I with respect to what data are considered in the EPA's analysis and when states are required to implement enforceable measures.

First, areas are initially designated attainment or nonattainment for the ozone NAAQS based on actual measured ozone concentrations. *See* CAA section 107(d), 42 U.S.C. 7407(d) (noting that an area shall be designated attainment where it "meets" the NAAQS and nonattainment where it "does not meet" the NAAQS (including certain "nearby" areas, as explained below)). If an area measures a violation of the relevant ozone NAAQS, then the area is generally designated nonattainment, regardless of what specific factors have influenced the measured ozone concentrations or whether such levels are due to enforceable emissions limits. In such cases where the an ozone nonattainment area is classified as Moderate or higher, the state is then required to develop an attainment plan, which generally includes the application of various enforceable control measures to sources of emissions located in the nonattainment area, consistent with the requirements in Part D of title I of the Act.⁵⁷ *See generally* CAA section 182, 42 U.S.C. 7511a. If, however, an area measures compliance with the ozone NAAQS, the area is designated attainment (unless it is included in the boundaries of a nearby nonattainment area due

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⁵⁷ Areas classified as Marginal nonattainment areas are required to submit emissions inventories and implement a nonattainment new source review permitting program but are not generally required to implement controls at existing sources. *See* CAA section 182(a), 42 U.S.C. 7511a(a).

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to its contribution to that area's nonattainment, as discussed below), and sources in that area generally are not subject to any new enforceable control measures under Part D.⁵⁸

In determining the boundaries of an ozone nonattainment area, the CAA requires the EPA to consider whether "nearby" areas "contribute" to ambient air quality in the area that does not meet the NAAQS. 42 U.S.C. 7407(d). For each monitor or group of monitors indicating a violation of the ozone NAAQS, the EPA assesses information related to various factors, including current emissions and emissions-related data from the areas near the monitor(s), for the purpose of establishing the appropriate geographic boundaries for the designated ozone nonattainment areas. A nearby area may be included within the boundary of the ozone nonattainment area only after assessing area-specific information, including an assessment of whether current emissions from that area contribute to the air quality problem identified at the

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⁵⁸ CAA section 184 contains the exception to this general rule: States that are part of the Ozone Transport Region are required to provide SIPs that include specific enforceable control measures, similar to those for nonattainment areas, that apply to the whole state, even for areas designated attainment for the ozone NAAQS. *See generally* 42 U.S.C. 7511c.

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violating monitor.⁵⁹ If such a determination is made, sources in the nearby area are also subject to the applicable Part D control requirements. However, if the EPA determines that the nearby area does not contribute to the measured nonattainment problem, then the nearby area is not part of the designated nonattainment area and sources in that area are not subject to such control requirements.

The EPA's historical approach to addressing the good neighbor provision via the fourstep interstate transport framework, and the approach the EPA continues to apply here, is consistent with title I requirements. That is, in steps 1 and 2 of the framework, the EPA (at step 1) evaluates whether there is a downwind air quality problem (either nonattainment or maintenance), and (at step 2) whether an upwind state impacts the downwind area such that it contributes to and is therefore "linked" to the downwind area. A determination by the EPA at step 1 of the good neighbor analysis (that it has not identified any downwind air quality problems to which an upwind state could contribute) is analogous to the EPA's determination in the

⁵⁹ See Attachment 2 to Area Designations for the 2008 Ozone National Ambient Air Quality Standards. Memorandum from Robert J. Meyers, Principal Deputy Assistant Administrator, U.S. EPA to Regional Administrators. December 4, 2008. Available at https://archive.epa.gov/ozonedesignations/web/pdf/area_designations_for_the_2008_revised_oz one naags.pdf and Attachment 3 to Area Designations for the 2015 Ozone National Ambient Air

Quality Standards. Memorandum from Janet G. McCabe, Acting Assistant Administrator, U.S. EPA to Regional Administrators. February 25, 2016. Available at https://www.epa.gov/sites/production/files/2016-02/documents/ozone-designations-guidance-2015.pdf.

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designation analysis that an area should be designated attainment. Similarly, a determination at step 2 of the good neighbor analysis (that, although there are downwind air quality problems, an upwind state does not sufficiently impact the downwind area such that the state contributes to that area's air quality problems and is therefore linked to that area) is analogous to the EPA's determination in the designation analysis that a nearby area does not contribute to a NAAOS violation in another area. Under the good neighbor provision, the EPA can determine at either step 1 or 2, as appropriate, that the upwind state will not contribute to air quality problems in downwind areas and, thus, that the upwind state does not significantly contribute to nonattainment or interfere with maintenance of the NAAQS in other states. See, e.g., CSAPR Update, 81 FR 74506 (determining that emissions from 14 states do not significantly contribute to nonattainment or interfere with maintenance of the 2008 ozone NAAQS); CSAPR, 76 FR 48236 (finding that states whose impacts on downwind receptors are below the air quality threshold do not significantly contribute to nonattainment or interfere with maintenance of the relevant NAAOS). Under such circumstances, sources in the upwind state are not required to implement any control measures under the good neighbor provision, which is analogous to the fact that under the designation and attainment regime, sources located in areas that are designated attainment (because the area is attaining the NAAQS and not contributing to any nearby nonattainment areas) generally are not required to implement the control measures found

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in Part D of the Act. *Cf. EME Homer City II*, 795 F.3d at 130 (determining that CSAPR ozoneseason NO_X budgets for 10 states were invalid based on determination that modeling showed no future air quality problems); CSAPR Update, 81 FR 74523–24 (removing three states from CSAPR ozone season NO_X program based on determination that states are not linked to any remaining air quality problems for the 1997 ozone NAAQS).

The EPA acknowledges one distinction between the good neighbor and designation analyses: the good neighbor analysis relies on *future-year* projections of emissions to calculate ozone concentrations and upwind state contributions, compared to the use of *current* measured data in the designations analysis. As described in more detail in Section III.C, this approach is a reasonable interpretation of the term "will" in the good neighbor provision, *see North Carolina*, 531 F.3d at 913–14, and interpreting language specific to that provision does not create an impermissible inconsistency with other provisions of title I. Moreover, the EPA's approach to conducting future-year modeling in the good neighbor analysis to identify downwind air quality problems and linked states is consistent with its use of current measured data in the designations process. The EPA's future-year air quality projections consider a variety of factors, including current emissions data, anticipated future control measures, economic market influences, and meteorology. Some of these factors (*e.g.*, emissions data, and meteorology) can affect the NOx emissions levels and consequent measured ozone concentrations that inform the designations

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process. Like the factors that affect measured ozone concentrations used in the designations process, not all of the factors influencing the EPA's modeling projections are or can be subject to enforceable limitations on emissions or ozone concentrations. However, the EPA believes that considering these factors contributes to a reasonable estimate of anticipated future ozone concentrations. *See EME Homer City II*, 795 F.3d at 135 (declining to invalidate the EPA's modeling projections "solely because there might be discrepancies between those predictions and the real world"); *Chemical Manufacturers Association* v. *EPA*, 28 F.3d 1259, 1264 (D.C. Cir. 1994) ("a model is meant to simplify reality in order to make it tractable"). Thus, the EPA's consideration of these factors in its future-year modeling projections used at steps 1 and 2 of the four-step interstate transport framework is reasonable and consistent with the use of measured data in the designation analysis.⁶⁰

The EPA notes that there is a further distinction between the CAA section 107(d) designations provision and the CAA section 110(a)(2)(D)(i) good neighbor provision in that the latter provision uses different terms to describe the threshold for determining whether emissions

⁶⁰ The EPA notes that the consideration of projected *actual* emissions in the future analytic year—as opposed to *allowable* levels—is also consistent with the statute's instruction that states in their SIPs (or the EPA when promulgating a FIP) prohibit emissions that "will" impermissibly impact downwind air quality. This term is reasonably interpreted to mean that the EPA should evaluate anticipated actual emissions (based on what sources *will* emit) rather than potential emissions (based on what sources *could* emit).

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in an upwind state should be regulated ("contribute significantly") as compared to the standard within the designations process for evaluating whether an area "contributes" to a violation in a nearby area. Thus, at step 3 of the good neighbor analysis the EPA evaluates additional factors, including cost and air quality considerations, to determine whether emissions from a linked upwind state would violate the good neighbor provision. Only if the EPA at step 3 determines that the upwind state's emissions would violate the good neighbor provision will it proceed to step 4 to require control of emissions in the upwind state to address the identified violation. This approach to steps 3 and 4 is analogous to the trigger for the application of Part D control requirements to sources upon designation of an area to nonattainment. Thus, the EPA reasonably interprets the good neighbor provision to not require it or the upwind state to proceed to step 4 and implement any enforceable measures to "prohibit" emissions unless it identifies a violation of the provision at step 3. See, e.g., 76 FR 48262 (finding at step 3 that the District of Columbia is not violating the good neighbor provision, and therefore will not at step 4 be subject to any control requirements in CSAPR, because no cost-effective emissions reduction opportunities were identified in the District).

The EPA further disagrees with the commenters' assertion that the incorporation of announced retirements and fuel switches into the 2023 projections makes the modeling data unreliable. Rather with respect to EGU NO_X emissions, the EPA's 2023 projections likely reflect

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a more conservative (*i.e.*, higher) NO_X emissions estimate than comparable alternative methods for projecting future EGU emissions. The EPA's 2023 EGU emissions projections used reported 2016 data, adjusting that data based only on currently known changes in the power sector and a change in emissions rate to reflect implementation of the CSAPR Update after 2017. As such, the EPA's approach does not account for changes that would be estimated to occur due to economic and other environmental policy factors. Trends in historic emissions data and emissions projections using a variety of methods and models suggest that inclusion of these factors would likely further reduce future NO_X emissions projections.

Several commenters further assert that, because the EPA is actively working to undo several major rules that underpin the 2023 modeling results (*e.g.*, the Glider Rule and the Corporate Average Fuel Economy (CAFE) Standards), the assumptions that underpin the EPA's 2023 modeling are inaccurate. One commenter specifically notes that, even in the absence of a rule change, the EPA announced formal policy to not enforce the existing Glider Rule.

The EPA disagrees that its 2023 projections are unreliable because of potential changes to other regulations. The EPA first notes that the Agency has not finalized any potential regulatory changes to the Glider Rule, the CAFE standards for light duty vehicles, or the oil and gas Control Technique Guidelines (CTG). In general, the mobile source and non-EGU emissions inventories do not reflect rulemakings finalized in calendar year 2016 or later, nor do they reflect

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any rules proposed but not yet finalized since 2016, as only finalized rules are reflected in modeling inventories. The EPA's normal practice is to only include changes in emissions from final regulatory actions in its modeling because, until such rules are finalized, any potential changes in NO_X or VOC emissions are speculative.

In addition, even if emissions were to change as a result of any such final rules, commenters have not indicated how these additional emissions would affect downwind ozone concentrations Regarding one commenter's assertion about the EPA's formal policy to not enforce the existing Glider Rule, the EPA notes that its conditional no action assurance of non-enforcement of the existing rule was withdrawn by the Agency on July 26, 2018.⁶¹ The withdrawal notice removes any question that current requirements are enforceable and enforcement actions may be undertaken on a case-by-case basis in the Agency's discretion. Therefore, assumptions relating to the Glider Rule as part of the 2023 modeling remain reasonable.

⁶¹ "Withdrawal of Conditional No Action Assurance Regarding Small Manufacturers of Glider Vehicles," Andrew R. Wheeler, Acting Administrator, July 26, 2018. Available at *https://www.epa.gov/sites/production/files/2018-07/documents/memo_re_withdrawal_of_conditional_naa_regarding_small_manufacturers_of_gl ider vehicles 07-26-2018.pdf*.

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The next two sections discuss the EPA's evaluation of and conclusions regarding the petition's step 1 analysis for Chautauqua County and the NYMA with respect to both the 2008 and 2015 ozone NAAQS.

Chautauqua County

First, with respect to the 2008 and 2015 ozone NAAQS in Chautauqua County, the EPA is finalizing its conclusion that New York's petition does not provide sufficient information to indicate that there is a current or expected future air quality problem (with respect to either nonattainment or maintenance) in the county with respect to either the 2008 or the 2015 ozone NAAQS. Although the petition correctly indicates that the EPA previously designated Chautauqua County as Marginal nonattainment under the 2008 ozone NAAQS, the area attained the 2008 ozone NAAQS by the relevant attainment date.⁶² In addition, the county was designated attainment for the more stringent 2015 standard.⁶³ The petition did not demonstrate that there is either a present air quality problem or that there will be a future nonattainment or maintenance

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⁶² See Air Quality Designations for the 2008 Ozone National Ambient Air Quality Standards, Final Rule, 77 FR 30137 (May 21, 2012); Approval and Promulgation of Air Quality Implementation Plans; New York; Determination of Attainment of the 2008 8-Hour Ozone National Ambient Air Quality Standard for the Jamestown, New York Marginal Nonattainment Area, 83 FR 49492 (October 2, 2018).

⁶³ See Air Quality Designations for the 2015 Ozone National Ambient Air Quality Standards, Final Rule, 82 FR 54264 (November 16, 2017).

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problem in that area for either NAAQS that must be addressed under the good neighbor provision. While a prior designation of an area as nonattainment may provide useful information for purposes of analyzing interstate transport under the good neighbor provision, designations themselves are not dispositive of whether a downwind area will have an air quality problem in the future.⁶⁴ As discussed earlier, the EPA evaluates downwind ozone air quality problems for purposes of step 1 of the four-step interstate transport framework using observed and modeled air quality concentrations for a future analytic year that considers the relevant attainment deadlines for the NAAQS and the anticipated compliance timeframe for potential control strategies.⁶⁵ New York's CAA section 126(b) petition does not include analyses or air quality projections indicating that Chautauqua County may be violating or have difficulty maintaining the 2008 or 2015 ozone NAAQS either currently or in a relevant future analytic year. In fact, the petition acknowledges that this area attained the 2008 ozone NAAQS by the relevant attainment date. The petition alleges that the area remains in danger of exceeding the ozone NAAQS but does not

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⁶⁴ The EPA has consistently taken the position that CAA section 110(a)(2)(D)(i)(I) refers to prevention of "nonattainment" in any area in another state, not only in designated nonattainment areas. *See, e.g.*, Clean Air Interstate Rule, 70 FR 25162, 25265 (May 12, 2005); Cross-State Air Pollution Rule, 76 FR 48208, 48211 (August 8, 2011); Final Response to Petition from New Jersey Regarding SO₂ Emissions From the Portland Generating Station, 76 FR 69052 (November 7, 2011) (finding facility in violation of the prohibitions of CAA section 110(a)(2)(D)(i)(I) with respect to the 2010 SO₂ NAAQS prior to issuance of designations for that standard). ⁶⁵ 81 FR 74517.

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provide any evidence to support this assertion. Thus, the petition has not established that emissions from the named sources are linked to a nonattainment or maintenance problem in Chautauqua County.

While the EPA finds that New York's petition does not on its own merit adequately establish the presence of a current or future nonattainment or maintenance problem in Chautauqua County, the EPA also used currently available air quality data to support an independent analysis of step 1 of the four-step interstate transport framework to assess whether Chautauqua County will have an air quality problem relative to either the 2008 or the 2015 ozone NAAQS. First, both the 2015-2017 and the 2016-2018 design values in Chautauqua County are 68 ppb, which is below the levels of both the 2008 and 2015 ozone NAAQS of 75 ppb and 70 ppb, respectively.⁶⁶

Additionally, the EPA's recent air quality modeling described previously indicates that the monitor in Chautauqua County is expected to continue to both attain and maintain both standards in 2023, with an average 2023 design value of 58.5 ppb and a maximum 2023 design

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⁶⁶ The 2015-2017 and 2016-2018 design value for Chautauqua County in the "Jamestown-Dunkirk-Fredonia, NY CBSA" at AQS site 360130006 is 68 ppb. Available at *https://www.epa.gov/sites/production/files/2019-*07/ozone designvalues 20162018 final 06 28 19.xlsx.

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value of 60.7 ppb.⁶⁷ Accordingly, the EPA has no basis to conclude that any of the sources named in the New York petition are linked to a downwind air quality problem in Chautauqua County with regard to the 2008 or the 2015 ozone NAAQS. In the absence of a downwind air quality problem, the EPA has no authority to regulate upwind sources to address air quality in Chautauqua County with respect to the 2008 or the 2015 ozone NAAQS.

One commenter asserts that New York demonstrated, by providing current, sometimes violating air quality data, that Chautauqua County is not attaining the 2008 or 2015 ozone standards. Specifically, the commenter notes that New York provided evidence demonstrating that the air quality monitor in Dunkirk, New York, located in Chautauqua County, sometimes exceeds the 2008 and the 2015 ozone standard with design values sometimes reaching 82 ppb.

The EPA disagrees that the example cited by the commenter provides evidence of either a current or future nonattainment or maintenance problem in Chautauqua County. As previously indicated, the EPA evaluates downwind ozone air quality problems using observed and modeled future air quality concentrations. The individual exceedances identified by the commenter do not indicate that the area is currently in violation of the NAAQS. Appendices P and U to 40 CFR Part 50 specify the methodologies for calculating the ozone design values for the 2008 and 2015

⁶⁷ See 2023 design values for AQS site 360130006 in spreadsheet released with the EPA's March 2018 memorandum. Available at *https://www.epa.gov/sites/production/files/2018-05/updated_2023_modeling_dvs_collective_contributions.xlsx.* Page 107 of 171

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ozone NAAQS, respectively, and both are calculated as the 3-year average of the annual fourthhighest daily maximum 8-hour ozone concentration. As noted above, both the 2015-2017 and the 2016-2018 design values in Chautauqua County, which are calculated consistent with these methodologies, demonstrate compliance with both the 2008 and 2015 ozone NAAQS. While an individual monitor (*e.g.*, the Dunkirk monitor) may record individual exceedances of the NAAQS, such as the 82 ppb value cited by the commenter, an individual exceedance does not constitute a violating "design value," which is the value used for identifying violations and determining attainment status for regulatory purposes.

New York Metropolitan Area

Second, with respect to the 2008 ozone NAAQS in the NYMA, the EPA is finalizing its conclusion that the petition does not provide sufficient information to indicate that the NYMA should be considered a nonattainment or maintenance receptor pursuant to the good neighbor provision. As described in Section I.B of this notice, the petition correctly asserts that the NYMA was designated nonattainment for the 2008 ozone NAAQS and has failed to attain the NAAQS by the attainment deadline. Additionally, the petition points to preliminary 2015-2017 air quality data (and commenters point to more current final 2015-2017 design values available after New York submitted its petition) indicating that some monitoring sites in the NYMA are above the 2008 NAAQS. The EPA notes in this regard that the 2016-2018 design values for the NYMA

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monitoring sites located in New York (and those in New Jersey) are attaining the 2008 NAAQS. Although some of the NYMA monitors located in Connecticut are above the 2008 NAAQS,⁶⁸ the EPA has interpreted CAA section 126(b)'s petition authority as limited to states and political subdivisions seeking to address interstate transport of pollution impacting downwind receptors within their geographical borders. *See* 83 FR 50460.

As noted in the proposal, an area's current attainment status alone is insufficient evidence regarding whether there "will" be a nonattainment or maintenance problem that must be addressed under either the good neighbor provision or CAA section 126. Rather, as discussed in Section IV.B of the proposal, the EPA evaluates whether there will be downwind nonattainment or maintenance concerns in each area with respect to each NAAQS under the good neighbor provision (and, thus, also under CAA section 126(b)) using observed and modeled future air quality concentrations for a relevant future analytic year. 84 FR 22799.

Further, the EPA has additional information related to potential projected nonattainment or maintenance problems in the NYMA. The EPA's recent air quality projections for 2023, based on the latest available emissions inventory, indicate that all monitoring sites in the NYMA will attain and maintain the 2008 ozone NAAQS. As discussed in Section II.C.2 of this notice, in the

⁶⁸ See 2016-2018 ozone design value report available at https://www.epa.gov/sites/production/files/2019-07/ozone_designvalues_20162018_final_06_28_19.xlsx. Page 109 of 171

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Determination Rule, the EPA determined based on this data that the CSAPR Update fully addresses the good neighbor provision requirements for the 2008 ozone NAAQS for all states previously addressed in that rule. This analysis indicates that all remaining receptors for the 2008 ozone NAAQS identified in the CSAPR Update, including those in the NYMA, are expected to attain and maintain that NAAQS in 2023 under step 1 of the four-step interstate transport framework, and, therefore, upwind states have no remaining obligations under the good neighbor provision. New York has not provided any new information that contradicts the EPA's conclusion in the Determination Rule that the NYMA will no longer have an air quality problem in the future.

Therefore, the EPA is finalizing its decision to deny New York's petition regarding the 2008 ozone NAAQS in the NYMA because New York has not demonstrated that there will be a nonattainment or maintenance problem in the NYMA in a relevant future year and the EPA's own analysis projects that there will be no air quality problems under step 1. As such, the EPA has no authority to regulate upwind sources to address air quality in the NYMA with respect to the 2008 ozone NAAQS.

Regarding the 2015 ozone NAAQS, based on the EPA's 2023 air quality modeling, the EPA has identified a relevant downwind air quality problem in the NYMA. The EPA's projections indicate that the average design value for five of the six monitoring sites in the

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NYMA and the maximum design values at all six monitoring sites in the NYMA will be above the 2015 ozone NAAQS in 2023.⁶⁹ Therefore, although New York did not evaluate whether there will be an air quality problem with respect to the 2015 ozone NAAQS in a future year, the EPA's independent analysis of step 1 of the interstate transport framework indicates that the NYMA is projected to have a downwind air quality problem relative to the 2015 NAAQS. Thus, the EPA is not denying this portion of the petition with respect to step 1 (but is denying the petition for other reasons described elsewhere).

One commenter asserts that New York demonstrated that the NYMA is not attaining the 2008 or 2015 ozone standards. Specifically, the commenter notes that certified monitoring data through 2016 and data from 2017 indicate that the NYMA did not attain the Moderate attainment deadline of July 20, 2018, for the 2008 standard. The commenter also identifies data from the 2017 Design Value Report, which demonstrates that the NYMA registered a 2015-2017 design value of 83 ppb, which significantly exceeds both the 2008 ozone standard of 75 ppb and the 2015 ozone standard of 70 ppb. The commenter further notes that the EPA has designated the NYMA as a Moderate nonattainment area for the 2015 ozone standard. The commenter further

⁶⁹ The EPA also notes that four of the six monitoring sites are in the state of Connecticut and two monitoring sites are in New York. Therefore, the EPA's determination as to the 2015 ozone NAAQS with respect to step 1 of the framework is only pertinent as to the New York monitoring sites.

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cites the 2015 Ozone NAAQS Interstate Transport Assessment Design Values and Contributions Report, which projects that a monitor in New York County will exceed the 2015 ozone standard of 70 ppb with an average design value of 74.4 ppb and a maximum design value of 75.5 ppb in 2023. The report also projects that a monitor in Queens County will have a maximum design value of 72.0 ppb in 2023, which exceeds the 2015 ozone standard of 70 ppb.

The EPA disagrees with the commenter's assertions regarding the status of New York monitors relative to the 2008 ozone NAAQS. As discussed earlier in this notice, regarding current air quality, the 2016-2018 design values for the NYMA monitoring sites located in New York (and those in New Jersey) are attaining the 2008 NAAQS. The design value of 83 ppb cited by the commenter reflects inclusion of the Connecticut monitors, but the EPA does not agree that such information is relevant to a petition submitted by New York.⁷⁰ The specific language of CAA section 126(b) does not say that a state may petition the EPA for a finding that emissions

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⁷⁰ As noted earlier in this notice, the design value is the 3-year average of the annual fourthhighest daily maximum 8-hour ozone concentration. To be comparable to the 2008 ozone NAAQS, the design value must be valid according to Appendix P to 40 CFR Part 50, which specifies minimum data completeness criteria. The design value listed for each area is the highest among monitors with valid design values. For the NYMA, the highest reading monitor is in Connecticut, not New York. The EPA interprets CAA section 126(b)'s petition authority to be limited to states and political subdivisions seeking to address interstate transport of pollution impacting downwind receptors within their geographical borders. Therefore, the Connecticut monitoring site is excluded from the scope of this petition.

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from a source, or group of sources, is impacting downwind receptors in a state other than the petitioning state. Rather, the legislative history for this provision suggests the provision was meant to address adverse air impacts only in the petitioning state.⁷¹ Given the broader context of CAA section 126, the EPA reasonably interprets CAA section 126(b)'s petition authority to be limited to states and political subdivisions seeking to address interstate transport of pollution impacting downwind receptors within their geographical borders.

Further, the EPA's recent air quality projections for 2023, based on the latest available emissions inventory, indicate that all monitoring sites in the NYMA will attain and maintain the 2008 ozone NAAQS. Accordingly, regardless of the current measured data, the EPA does not have a basis to conclude that the NYMA will have an air quality problem with respect to the 2008 ozone NAAQS in a relevant future year that would justify a finding under CAA section 126(b).

⁷¹ When section 126 was added to the CAA, the Senate's amendment implementing the basic prohibition on interstate pollution stated that: "Any State or political subdivision may petition the Administrator for a finding that a major stationary source in another state emits pollutants which would adversely affect the air quality in the *petitioning* State." (emphasis added). Clean Air Act Amendments of 1977, H.R. 95–564, 95th Cong. at 526 (1977). The House concurred with the Senate's amendment to CAA section 126, with changes to other portions of the amendment, but did not indicate changes to this sentence. *Id.* The lack of stated changes to this component of the Senate's original amendment suggest that Congress did not intend for the scope of the petitioning authority to be expanded to parties other than a state or political division in which downwind air quality is adversely affected.

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2. The EPA's evaluation of New York's petition considering step 2

With respect to step 2 of the four-step interstate transport framework, the EPA evaluated New York's petition and determined that neither the information in the petition nor existing information available to the EPA indicates there will be downwind nonattainment or maintenance concerns in Chautauqua County with respect to the 2008 and 2015 ozone NAAQS, or in the NYMA with respect to the 2008 ozone NAAQS. For these reasons, the EPA has no basis to proceed to consider whether there is a linkage at step 2 of the four-step interstate transport framework between the named upwind states and these downwind areas regarding the respective NAAQS.

As previously noted, regarding the 2015 ozone NAAQS, the EPA has identified a relevant downwind air quality problem in the NYMA. The EPA's recent 2023 air quality modeling supports an assessment that emissions from at least some of the states named in the petition are linked to a downwind air quality problem at step 2. As the following paragraphs explain, the linkages between upwind and downwind states are further informed by an air quality screening threshold.

Historically, at step 2, the EPA has used an air quality screening threshold to determine whether a state contributes to a downwind air quality problem in amounts that warrant further evaluation as part of a multi-factor analysis in step 3. Upwind states that impact a downwind

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receptor by less than the screening threshold do not significantly contribute or interfere with maintenance of the NAAQS in the downwind area at step 2. The EPA has therefore previously determined, without conducting any additional analysis at step 3, that such states do not significantly contribute to nonattainment or interfere with maintenance of the NAAQS under the good neighbor provision. Upwind states that the EPA finds under the step 2 analysis impact a downwind receptor at or above the threshold are identified as contributing to a projected downwind air quality problem (*i.e.*, they are said to be "linked" to that downwind receptor) and require additional analysis to determine if the contribution is "significant" or "interferes with maintenance." The EPA then proceeds to the multi-factor step 3 analysis to determine what, if any, of the emissions from the linked upwind state significantly contribute to nonattainment or interfere with maintenance of the NAAQS at the downwind receptor(s).⁷²

In previous federal actions,⁷³ the EPA's analysis of the sum of contributions from all linked upwind states (*i.e.*, collective contribution) concluded that a screening threshold

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⁷² Note that upwind states that are linked to a downwind receptor at step 2 may nevertheless be found to not significantly contribute to nonattainment or interfere with maintenance at the receptor depending on the outcome of the step 3 analysis.

⁷³ In the Cross-State Air Pollution Rule (CSAPR), the EPA used 0.80 parts per billion (ppb) as the threshold, which is 1 percent of the 1997 ozone NAAQS. 76 FR 48208, 48238 (August 8, 2011). Most recently, in the Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS (CSAPR Update), the EPA used 0.75 ppb as the threshold, which is 1 percent of the 2008 ozone NAAQS. 81 FR 74504, 74518 (October 26, 2016).

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equivalent to 1 percent of the 1997 and 2008 ozone NAAQS was appropriate at step 2. In an August 31, 2018, memorandum, the EPA presented the results of an analysis of collective contribution for the 2015 ozone NAAQS⁷⁴ using data drawn from the results of the EPA's updated 2023 modeling.⁷⁵ This analysis, which considered the same factors as the thresholds analyses conducted in both the CSAPR and CSAPR Update rulemakings,^{76,77} included the evaluation of data pertinent to several potential thresholds (*i.e.*, 1 percent of the 2015 ozone NAAQS or 0.70 ppb, 1 ppb and 2 ppb) that could be applicable to the development of SIP revisions to address the 2015 ozone NAAQS of 70 ppb. The EPA ultimately suggested in this memorandum that a threshold of 1 ppb may be appropriate for states to use to develop SIP revisions addressing the good neighbor provision for the 2015 ozone NAAQS.

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⁷⁴ See Analysis of Contribution Thresholds for Use in Clean Air Act Section 110(a)(2)(D)(i)(I) Interstate Transport State Implementation Plan Submissions for the 2015 Ozone National Ambient Air Quality Standards (August 31, 2018).

⁷⁵ Information on the Interstate Transport State Implementation Plan Submissions for the 2015 Ozone National Ambient Air Quality Standards under Clean Air Act Section 110(a)(2)(D)(i)(I) (March 2018). *https://www.epa.gov/airmarkets/march-2018-memo-and-supplementalinformation-regarding-interstate-transport-sips-2015*.

⁷⁶ Air Quality Modeling Technical Support Document for the Final Cross State Air Pollution Rule Update (August 2016). *https://www.epa.gov/airmarkets/air-quality-modeling-technical-support-document-final-cross-state-air-pollution-rule*.

⁷⁷ Air Quality Modeling Final Rule Technical Support Document (for the Final Transport Rule now known as CSAPR; June 2011). *https://www.epa.gov/csapr/air-quality-modeling-final-rule-technical-support-document*.

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In addition to the 2023 modeling used to identify potential downwind air quality problems described in the prior section, the EPA has also performed state-level ozone source apportionment modeling to provide information regarding the expected contribution of statewide, anthropogenic NO_X and VOC emissions in each state to projected 2023 ozone concentrations. If the EPA applies a 1 percent threshold like that used in prior rulemakings (*e.g.*, 0.70 ppb) to the results of the contribution modeling, the EPA's analysis indicates that all nine upwind states named in the petition are linked to an air quality problem in the NYMA for the 2015 ozone NAAQS. If the EPA instead applies the alternative 1 ppb threshold, the EPA's analysis indicates that the emissions from six (*i.e.*, Maryland, Michigan, Ohio, Pennsylvania, Virginia and West Virginia) of the nine states named in New York's petition are linked to an air quality problem in the NYMA for the 2015 ozone NAAQS, while three states (*i.e.*, Illinois, Indiana and Kentucky) are not.

Some commenters disagree with the EPA's guidance suggesting that states may use a 1 ppb threshold instead of a threshold equivalent to 1 percent of the NAAQS as the threshold to show a linkage between emissions from upwind states on air quality in downwind states. As explained in the proposal, the EPA's August 31, 2018, memorandum to states conveying the results of our analysis of collective contribution for the 2015 ozone NAAQS is guidance and not a regulation. It does not change or replace any legal requirements in the CAA or implementing

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regulations. At this time, the EPA has not engaged in a good neighbor rulemaking action for the 2015 ozone NAAQS that determines which of the potential thresholds (*e.g.*, 1 percent of the NAAQS (0.70 ppb) or 1 ppb) is appropriate for addressing collective contribution for the 2015 ozone NAAQS for purposes of New York's petition or for any other purposes. Additionally, as previously described, the EPA is also not here deciding an appropriate screening level that might be applied for future good neighbor analyses for the 2015 ozone NAAQS. The EPA is therefore not basing its denial of New York's petition on use of any particular threshold at step 2. Rather, the EPA acknowledges that emissions from at least some of the named upwind states are linked to projected air quality problems in the NYMA for the 2015 ozone NAAQS. Therefore, the EPA proceeds assuming, without deciding, that the named states are linked at step 2 and, as discussed in more detail in Section III.C.3 of this notice, the EPA has evaluated the sufficiency of the petition's demonstration with respect to step 3.

3. The EPA's evaluation of New York's petition considering Step 3

As described in Section II.C.1 of this notice, once an upwind state is linked to a downwind air quality problem at steps 1 and 2 of the four-step interstate transport framework, the next step is to identify the emissions reductions, if any, needed from particular sources to eliminate the upwind state's significant contribution to nonattainment and interference with

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maintenance of the NAAQS (*i.e.*, step 3 of the four-step interstate transport framework).⁷⁸ In the proposal at step 3, the EPA proposed to find that material elements in New York's analyses are technically deficient, such that the EPA cannot conclude that any source or group of sources in any of the named states will significantly contribute to nonattainment or interfere with maintenance in Chautauqua County or the NYMA relative to the 2008 and 2015 ozone NAAQS. Although the EPA already proposed to deny the petition as to Chautauqua County (for the 2008 and 2015 ozone NAAQS) and NYMA (for the 2008 ozone NAAQS) at step 1 of the four-step interstate transport framework, the EPA also proposed to rely on our assessment of step 3 as an additional and independent basis for denial as to the petition's claims for these areas with respect to both NAAQS. For the reasons discussed in this section, the EPA is finalizing its conclusion with respect to the adequacy of New York's petition at step 3.

Applying Step 3 of the Four-Step Interstate Transport Framework

⁷⁸ Contrary to New York's assertion in its petition, identification of a linkage between an upwind state and a downwind receptor does not conclude the determination regarding whether sources in the upwind state will significantly contribute to nonattainment or interfere with maintenance of the NAAQS. The conclusion that a state's emissions met or exceeded the threshold only indicated that further analysis was appropriate to determine *whether* any of the upwind state's emissions met the statutory criteria under the good neighbor provision. *See EME Homer City*, 572 U.S. at 501-03 (noting upwind states are only obliged to eliminate emissions meeting both the step 2 and 3 inquiries).

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As discussed in Section III.A of this notice, the EPA maintains that the four-step framework provides a logical, consistent and systematic approach for addressing interstate transport for a variety of criteria pollutants under a broad array of national, regional and local scenarios. The complexity of atmospheric chemistry and the nature of ozone transport also demonstrate the appropriateness of the four-step interstate transport framework particularly within step 3, where upwind sources are evaluated to determine whether they have emissions that significantly contribute to nonattainment or interfere with maintenance of the ozone NAAQS.

As discussed in Section II.C.1 of this notice, within step 3 of the four-step interstate transport framework, the EPA has historically considered several factors to determine whether sources in linked upwind states have emissions that will significantly contribute to nonattainment or interfere with maintenance of the ozone NAAQS. In particular, the EPA has generally considered various control, cost, and air quality factors and data, including: the types of control strategies that can be implemented at sources within the upwind states; the costs of implementing such control strategies; the amount of potential emissions reductions from implementation of control strategies at upwind sources; the potential downwind air quality improvements from such emissions reductions and the severity of the downwind air quality problem (*i.e.*, whether the air quality problem will be resolved through implementation of the emissions reductions). *See* CSAPR, Final Rule, 76 FR 48248-49 and 48254-55; CSAPR Update, Final Rule, 81 FR 74519;

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Ozone Transport Policy Analysis Final Rule TSD, p. 3 (Docket ID No. EPA-HQ-OAR-2015-0500). The EPA has typically considered these various cost and air quality factors in a multifactor analysis to identify the appropriate uniform level of emissions controls to apply to sources across a region of upwind states that are collectively linked to downwind air quality problems and, based on the selected level of control, to quantify the emissions (if any) from each upwind state that contribute significantly to nonattainment or interfere with maintenance in a downwind area.⁷⁹ The quantity of emissions identified in step 3 are then controlled through permanent and enforceable measures in step 4 of the four-step interstate transport framework. In these prior rules, the EPA has selected the level of control stringency deemed cost-effective, compared to other levels of control stringency considered in the analysis, when these factors are balanced together. Assessing multiple factors allows the EPA to consider the full range of circumstances and state-specific factors that affect the relationship between upwind emissions

⁷⁹ For example, in the CSAPR Update, the EPA noted that ozone transport occurs on a regional scale, that such transport is responsive to changes in NO_X emissions, and that NO_X emissions reductions from EGUs were effective in reducing 8-hour peak ozone concentrations during the ozone season. 81 FR 74505. Accordingly, the EPA selected a uniform control stringency to apply to states covered by the rule by identifying the emissions reduction potential from EGUs in linked upwind states available at various levels of control stringency represented by cost, assessed how these potential emissions reductions would affect each state's air quality contributions to each receptor, evaluated the total change in air quality at each receptor resulting from the emissions reductions, and evaluated whether the air quality problems at each receptor would be resolved. The EPA applied a similar approach in the CSAPR Final Rule. 76 FR 48248. Page 121 of 171

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and downwind nonattainment and maintenance problems. For example, the EPA's assessment of cost considerations accounts for the existing level of controls at sources in upwind states as well as the potential for, and relative difficulty of, achieving additional emissions reductions. Additionally, assessment of the downwind air quality impacts from the potential upwind emissions reductions is essential to determining whether various levels of potential control stringency would under- or over-control upwind state emissions relative to the identified downwind air quality problems. The Supreme Court has found the EPA's approach to apportioning emissions reduction responsibility among multiple upwind states under these circumstances to be "an efficient and equitable solution to the allocation problem" presented by the good neighbor provision for regional problems like the transport of ozone pollution. *EME Homer City*, 572 U.S. at 519. As discussed extensively in this action, the good neighbor provision 126(b) petitions are closely textually and analytically linked to one another, supporting the EPA's view that the considerations set forth above are appropriate for the EPA's analysis of such petitions.

Several commenters assert that it is inappropriate for the EPA to consider costeffectiveness in evaluating CAA section 126(b) petitions, because they contend the statute does not contemplate consideration of cost-effectiveness in making findings.

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The EPA disagrees that is inappropriate for the EPA to consider cost-effectiveness in evaluating CAA section 126(b) petitions. As further described in Section II.B, the EPA believes it is appropriate to interpret "contribute significantly to nonattainment" and "interfere with maintenance" as meaning the same thing under both CAA sections 110(a)(2)(D)(i)(I) and 126(b) because, while these two provisions provide independent regulatory processes, they are also closely linked in that they both address the interstate transport of emissions that significantly contribute to nonattainment or interfere with maintenance of a NAAOS. Importantly, CAA section 126(b) provides no independent standard for determining whether violations exist, but instead directly incorporates the CAA section 110(a)(2)(D)(i)(I) standard. Accordingly, the EPA's decision whether to grant or deny a CAA section 126(b) petition regarding both the 2008 and 2015 ozone NAAQS depends on application of the four-step interstate transport framework used to interpret CAA section 110, further described in Section II.C.1, which includes consideration of cost-effectiveness under step 3 to determine whether, and if so in what "amounts" under the terms of the statute, upwind sources will significantly contribute to nonattainment or interfere with maintenance of the NAAQS. Given the complexities of evaluating ozone transport, applying the four-step interstate transport framework is a logical

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approach, and has been used by the EPA in numerous rulemakings, including in actions on CAA section 126(b) petitions.⁸⁰

The EPA has repeatedly found that ozone transport problems are the result of individually small impacts from numerous sources that can have collectively large impacts on downwind ozone concentrations. Considering this "thorny causation problem," *EME Homer City*, 572 U.S. at 514, the EPA must determine how to apportion responsibility for emissions reductions across many sources in many states. The EPA has considered cost within its step 3 analysis in each of its regional ozone transport rulemaking and the Supreme Court has endorsed the use of cost in this manner as an "efficient and equitable" solution to the problem of apportioning upwind emissions reduction responsibility. *Id.* at 519. Thus, in evaluating a CAA section 126(b) petition, it is reasonable for the EPA to similarly evaluate whether the petition has demonstrated that the sources identified can be cost-effectively controlled in determining

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⁸⁰ See Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone (also known as the NO_X SIP Call), 63 FR 57356 (October 27, 1998); Clean Air Interstate Rule (CAIR) Final Rule, 70 FR 25162 (May 12, 2005); CSAPR Final Rule, 76 FR 48208 (August 8, 2011); CSAPR Update for the 2008 Ozone NAAQS (CSAPR Update) Final Rule, 81 FR 74504 (October 26, 2016); Determination Regarding Good Neighbor Obligations for the 2008 Ozone National Ambient Air Quality Standard (the Determination Rule), Final Rule, 83 FR 65878 (December 21, 2018); Response to June 1, 2016 Clean Air Act Section 126(b) Petition from Connecticut, Final Action, 83 FR 16070 (April 13, 2018) and Response to Clean Air Act Section 126(b) Petitions from Delaware and Maryland, Final Action, 83 FR 50453 (October 5, 2018).

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whether the petition demonstrates that the sources are in violation of CAA section 110(a)(2)(D)(i)(I). This is particularly true for New York's petition, where the EPA is tasked with determining whether approximately 350 facilities (many of which have multiple individual emitting units⁸¹) in nine upwind states are operating in violation of the good neighbor provision as alleged in the petition.

Responsibility for Step 3 Analyses Supporting a CAA section 126(b) Finding

As discussed earlier, the EPA interprets CAA section 126(b) as placing a burden on the petitioner to demonstrate that a finding under the provision is justified. The EPA's interpretation of the statute is reasonable given that Congress allotted the EPA only 60 days from its receipt of a CAA section 126(b) petition to hold a hearing and act on that petition. Given the short statutory deadline, it is reasonable for the EPA to conclude that Congress did not intend to require the EPA to undertake extensive fact-finding or independent analysis as part of its action on a petition and instead placed the burden upon the petitioner to provide adequate support for a requested finding under CAA section 126(b), an interpretation affirmed by the courts. *See New York v. EPA*, 852 F.2d 574 (D.C. Cir. 1988) (upholding the EPA's interpretation of the statutory burden in reviewing the EPA's denial of separate CAA section 126(b) petitions filed by Pennsylvania,

⁸¹ For example, while the list of facilities in the nine named states in New York's petition includes 121 EGU facilities, the number of individual EGUs currently in operation at those 121 facilities is more than double that number.

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Maine, and New York regarding air quality impacts from numerous sources located in seven midwestern states); *cf. Citizens Against Ruining the Environment v. EPA*, 535 F.3d 670 (7th Cir. 2008) (affirming the EPA's similar interpretation of the petitioner's burden under CAA section 505(b)(2) given the parallel 60-day deadline for the EPA to respond to a title V petition). In *New York*, the D.C. Circuit evaluated the EPA's obligation in acting on a CAA section 126(b) petition, determining that the 60-day deadline for action meant Congress did not intend for the EPA to undertake a "litany of tasks" in evaluating the petition and finding that denial was proper where the states failed to substantiate the claims raised in their petitions. *Id.* Accordingly, where a CAA section 126(b) petition does not contain sufficient technical information or justification to support the requested finding without the EPA undertaking an independent analysis, it is reasonable for the EPA to interpret CAA section 126(b) to support a denial of the petition.

The remedy provision under CAA section 126(c) further supports the reasonableness of the EPA's interpretation regarding the petitioner's burden. CAA section 126(c) by default requires an existing source to cease operation within 3 months if the EPA makes the requested finding under CAA section 126(b). The EPA does not believe it was the intent of Congress to require sources to shut down entirely absent a sufficient demonstration that such an extreme remedy was necessary. This concern is exacerbated by the provision of CAA section 126(b) that permits a petitioner to target "groups of sources," as New York did in the petition that is subject

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to this action. The EPA does not believe it is reasonable to think that Congress could have envisioned that hundreds of stationary sources would be required to shut down within 3 months without petitioners providing a complete and compelling justification for such drastic consequences.⁸² The potential for such an unintended consequence further supports the placement of burden on the petitioner to demonstrate in the first instance whether the identified sources emit or would emit in violation of the good neighbor provision.

The breadth of New York's petition demonstrates why the EPA's interpretation is particularly reasonable. The petition named approximately 350 facilities from several different source sectors (both EGU facilities and non-EGU facilities) in nine different upwind states and asked the EPA to evaluate and implement source-specific emissions limits for each source. While the EPA has air quality modeling information relevant to the step 1 and 2 analyses discussed earlier, this analysis was already available because the EPA completed this modeling

⁸² While CAA section 126(c) provides in the alternative that the EPA may permit continued operation if it establishes emissions limitations for the sources subject to the finding within that 3-month period, this too is a detailed analytic task that requires time and resources to develop. As discussed later in this section, the EPA concedes that the Agency bears the burden of developing any emissions limitations appropriate under CAA section 126(c) once a finding under CAA section 126(b) is made, but this does not also shift the burden of justifying the finding itself onto the EPA. Rather, this further supports the EPA's conclusion that the petitioner must bear the burden of providing sufficient justification for a CAA section 126(b) finding given that the EPA may also need to develop a CAA section 126(c) remedy within the short timeframe provided for the EPA's action on a petition.

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effort for separate rulemaking actions and not solely for use in evaluating this petition. In contrast, the EPA has not already developed the type of multifactor test, collected the needed data for the relevant factors, or conducted the analysis that it would normally use in step 3 to determine whether the named group of upwind sources (or any other sources) emits or would emit in violation of the good neighbor provision. The EPA also does not currently have sufficient information available that would be necessary to independently conduct such an analysis. As noted in the Determination Rule (81 FR 65878), the EPA currently lacks the relevant data to conduct such an analysis for the multiple non-EGU source categories, including those referred to in this petition. Collecting the relevant data and conducting such an analysis independently would require the EPA to invest significant time and resources and likely to undertake such data collection efforts under a formal information collection request.⁸³ As discussed in more detail in this section, the 60-day deadline provided by Congress for action under CAA section 126(b) is evidence that Congress did not intend for the EPA to be required to conduct such detailed independent analyses before acting on the petitions, especially where a petition addresses a large number and variety of sources and seeks tailored unit-level remedies, as New York's petition

⁸³ An information collection request (ICR) is a set of documents that describes reporting, recordkeeping, survey, or other information collection requirements imposed on the public by a federal agency. The Paperwork Reduction Act stipulates that every federal agency must obtain approval from the Office of Management and Budget (OMB) before collecting the same or similar information from 10 or more members of the public. Page 128 of 171

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does. While the EPA acknowledges that this task may also be resource- and time-intensive for a petitioner, the EPA nonetheless interprets the timeframe imposed on the EPA in CAA section 126(b) (along with the potentially severe consequences under CAA section 126(c) if a finding is made) as evidence that the burden is on the petitioner to demonstrate that the statutory threshold has been met.

The EPA received several comments generally conceding the petitioner bears some burden under CAA section 126(b), but asserting that nothing in CAA section 126, including the plain language of this provision, contemplates a burden on petitioner to provide information about the factors relevant to step 3 or to conduct such an analysis of the named sources, as the information regarding the sources that would be necessary for the analysis is outside of the petitioning state's control. Commenters take issue with the EPA requiring an analysis by petitioner describing the downwind air quality impacts of controlling the named sources "relative to other sources," asserting that the federal government is responsible for managing the petition process in a swift manner and bears the burden for conducting intensive analyses on groups of sources presented by petitioners. Commenters also contend that by placing the burden on petitioners to provide information and analyses related to step 3, the EPA is inconsistently placing such burden on petitioners in comparison with its prior actions on Connecticut's, Delaware's, and Maryland's CAA section 126(b) petitions.

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The EPA disagrees with these comments. As an initial matter, the plain language of CAA section 126 does not speak to whether the burden is on petitioner or the EPA to substantiate the requested finding. By contrast, other CAA statutory provisions that provide for a petition process clearly speak to the placement of burden for making the requisite demonstration for a successful petition. See e.g., CAA sections 111(g), 505(b)(2). Accordingly, in the absence of such plain language, CAA section 126 is ambiguous as to this issue and the EPA may reasonably interpret CAA section 126 in determining the placement of burden in the context of acting on a state's petition. As described at proposal and consistent with the EPA's historical approach to evaluating CAA section 126 petitions, the EPA reasonably interprets the statute to place the burden on petitioner to establish a technical basis for the specific finding requested given the short statutory deadline for acting on CAA section 126 petitions. 84 FR 22797. As the commenter acknowledges, the D.C. Circuit determined in reviewing a prior EPA action on a CAA section 126(b) petition that, based on the 60-deadline for action on such a petition, it is reasonable to conclude that petitioners bear the burden to make any necessary technical demonstration to support a finding. New York, 852 F.2d at 578. What commenters do not acknowledge is that the court in that case further concluded that Congress did not intend the EPA to be required to perform a litany of tasks "in such a short period of time in the absence of the

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clearest expression." *Id.* at 578.⁸⁴ For these reasons, the EPA believes not only that such a "clearest expression" is absent from CAA section 126(b) but also that in such absence, it is at least reasonable to interpret Congressional intent as being to the contrary.

Further by way of analogy, CAA section 505(b)(2) gives the EPA 60 days to act on a petition requesting the Agency to make an objection to a title V permit. While CAA section 505(b)(2) contains an explicit demonstration burden on the petitioner, the EPA has interpreted the demonstration burden as crucial in part based on the limited nature of the 60-day deadline. The EPA has previously described that it relies on the petitioner's demonstration in determining whether to make the petitioner's requested objection because the 60-day window is reasonably read as not requiring the Agency to engage in extensive fact-finding or investigation. *See* In the Matter of Consolidated Environmental Management, Inc. – Nucor Steel Louisiana, Partial Order Responding to Petitioners' May 3, 2011 & October 3, 2012 Requests that the Administrator Object to the Issuance of Title V Operating Permits, 4-6 (June 19, 2013), *available at*

⁸⁴ In determining that the 60-day deadline under CAA section 126(b) is reasonably read to not require the EPA to undertake certain tasks, the court acknowledged the 6-month extension available under CAA section 307(d)(10) as part of its analysis. *New York*, 852 F.2d at 578 n.2. While the statute separately permits the EPA up to 6 additional months to complete the rulemaking processes required by CAA section 307(d) when acting on a CAA section 126(b) petition, this provision applies to any statutory deadline which requires promulgation of an action less than 6 months after a proposal is issued. Thus, it cannot be read to independently create an obligation for the EPA to conduct detailed technical analyses.

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https://www.epa.gov/sites/production/files/2015-

08/documents/nucor_steel_partialresponse2011.pdf. In Citizens Against Ruining the

Environment v. EPA, the Seventh Circuit substantiated this interpretation by noting that, because of the limited timeframe Congress gave the EPA to decide whether to object to a permit, "it is reasonable in this context for the EPA to refrain from extensive fact-finding." *Citizens Against Ruining the Environment,* 535 F.3d at 678. Given the parallel 60-day deadline under CAA section 126(b), the EPA believes it equally reasonable to construe that under CAA section 126(b), in the absence of a petition containing adequate technical information or justification necessary for the EPA to determine whether the requested finding is warranted, the EPA is not required to undertake its own extensive fact-finding or investigation and may deny the petition.⁸⁵

The EPA also disagrees with commenters who suggest that, while New York as the

petitioning state has the burden to demonstrate the named sources are located in upwind states

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⁸⁵ The EPA notes while there is a parallel 60-day deadline under both petition provisions, there is no analogous mechanism for the EPA to grant itself an extension for acting on a petition submitted under CAA section 505(b)(2) as there is under CAA 307(d)(10) for CAA section 126(b) petitions. However, unlike CAA section 505(b)(2), the Act places additional requirements on the EPA to hold a public hearing, pursuant to CAA section 126(b), and to engage in a formal rulemaking process under CAA section 307(d), including issuance of a proposed action, provision of a public comment period and the obligation to formally respond to significant adverse comments. Therefore, while an extension is available to the EPA for acting on a CAA section 126(b) petition, there are additional procedural requirements that the EPA must satisfy during this time period that petitions submitted under CAA section 505(b)(2) do not need to address.

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that are linked to downwind impacts on New York under steps 1 and 2, petitioning states do not have the burden to provide a step 3 analysis, but rather, that it is the EPA's burden.

These comments are based on a fundamental misunderstanding of the purpose of steps 2 and 3 of the four-step interstate transport framework. Identification of a linkage between an upwind state and a downwind receptor at step 2 of the inquiry does not conclude the determination regarding whether sources in the upwind state will significantly contribute to nonattainment or interfere with maintenance of the NAAQS. Rather, the conclusion that a state's emissions met or exceeded the threshold only indicated that further analysis, conducted in step 3, is appropriate to determine *whether* any of the upwind state's emissions met the statutory criteria under the good neighbor provision and if so, in what amounts. The EPA does not draw any conclusions regarding whether sources in upwind states are emitting in violation of the prohibition of the good neighbor provision until the step 3 analysis is concluded. *See EME Homer City*, 572 U.S. at 501-03 (noting upwind states are only obliged to eliminate emissions meeting both the step 2 and 3 inquiries). Thus, as the EPA has interpreted CAA section 126(b) as imposing on the petitioner the burden to demonstrate that a finding is warranted, the petitioner only fulfills that burden if both a step 2 and step 3 analysis are provided with the petition.

An interpretation of CAA section 126(b) placing any burden regarding a step 3 costeffectiveness analysis on the EPA, particularly for a petition that names approximately 350

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facilities with an even larger number of individual emitting units, is unreasonable in light of the statutory 60-day deadline and contravenes the D.C. Circuit's conclusion in *New York* that Congress did not intend such a task to fall on the EPA. Such a task is infeasible within the statutory deadline, and thus the EPA believes a much more reasonable interpretation of CAA section 126(b) is to place the demonstration burden on the petitioner. Contrary to commenter's assertion, the placement of burden to perform a step 3 analysis is consistent with the EPA's historical practice in reviewing CAA section 126(b) petitions.⁸⁶ While the EPA has, at times, performed an independent step 3 analysis in evaluating a CAA section 126(b) petition, it has chosen to do so where it has had existing information and analyses available or where the petition identified a single source that would require less time to evaluate.⁸⁷ The EPA's consideration of existing information and analyses in such circumstances does not, however, shift the burden to the EPA to engage in fresh fact-finding or analyses in all future petitions.

⁸⁶ Response to June 1, 2016 Clean Air Act Section 126(b) Petition from Connecticut, Final Action, 83 FR 16070 (April 13, 2018) and Response to Clean Air Act Section 126(b) Petitions from Delaware and Maryland, Final Action, 83 FR 50453 (October 5, 2018).

⁸⁷ Response to June 1, 2016 Clean Air Act Section 126(b) Petition from Connecticut, Final Action, 83 FR 16070 (April 13, 2018) and Response to Clean Air Act Section 126(b) Petitions from Delaware and Maryland, Final Action, 83 FR 50453 (October 5, 2018) and Final Response to Petition from New Jersey Regarding SO₂ Emissions From the Portland Generating Station, 76 FR 69052 (November 7, 2011).

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The interpretation that the petitioner bears the burden under CAA section 126(b) to conduct the step 3 analysis is especially reasonable when considering what would otherwise occur if CAA section 126(b) were understood to require the EPA to undertake the required technical analysis for determining whether a petition's requested finding should be made. Notably, New York's petition names numerous sources, including more than 220 non-EGU facilities, for which the EPA does not have all of the information necessary to conduct a full step 3 analysis (*e.g.*, the current operating status of each named facility, the magnitude of emissions from each emitting unit within each named facility, the existing controls on each of these emissions units, additional control options on each emissions unit, the cost of each potential control option, the emissions reductions potential resulting from the installation of controls, and potential air quality impacts of emissions reductions).

Because the EPA does not independently have sufficient information about these sources to perform an analysis under the four-step interstate transport framework that it can use to supplement or stand in for New York's analysis, the EPA has not done so here. For a petition that names numerous sources, as New York's petition does, an alternative interpretation of burden under CAA section 126(b) would require the EPA to conduct a time- and resourceintensive analysis of whether all of this multitude of sources have cost-effective emissions reductions available under step 3, in addition to the mandatory notice-and-comment process, all

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within 60 days (or up to an additional 6 months, invoking the extension provision in CAA section 307(d)(10)) to meet its statutory deadline to take action on the petition.⁸⁸ If the EPA had insufficient time to conduct such an independent analysis, the commenters contention would have severe consequences. Essentially, the commenters suggest that the EPA is, in the absence of its own step 3 analysis, nonetheless required to make the requested finding simply because the states in which the named sources are located are linked to a downwind air quality problem at step 2. This would further mean that all of the named sources would be required to shut down within 3 months of the finding—a result the petitioner has not requested. Moreover, this means that a CAA section 126(b) petitioner could choose to target any source in any linked upwind state—regardless of its particular size, source characteristics, or downwind impacts—and demand that the EPA require the source to shut down simply because it is located in the linked state. As discussed in in this section, such results could not have been intended by Congress in promulgating the petition process in CAA section 126.

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⁸⁸ The EPA also notes that as a matter of administrative law in the context of when an agency declines to undertake rulemaking, the Supreme Court has found that "an agency has broad discretion to choose how best to marshal its limited resources and personnel to carry out its delegated responsibilities." *Massachusetts v. EPA*, 549 U.S. 497, 527 (2007). This principle is especially salient when an agency has limited time statutorily for determining whether rulemaking is necessary.

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The burden on New York to perform a step 3 analysis may appear to be high in this case, but CAA section 126 does not place any deadline on petitioners for submitting such a petition and thus provides time for petitioners to perform such an analysis, contrary to the deadline placed on the EPA in acting on it. Moreover, the apparent weight of the burden in this case is the natural result of the petitioner's decision to name approximately 350 facilities (each, potentially with multiple emissions units) from 9 states, which essentially amounts to seeking a regional action.

Certain commenters further suggest that their approach, which would require the EPA to bear the burden for conducting extensive analyses on groups of sources presented by petitioners, is supported by legislative history cited by the Third Circuit in its *GenOn* decision, wherein the court noted that the federal government is the entity that "can and must provide the technical information and enforcement assistance that States and localities need." 722 F.3d at 523 (quoting S.Rep. No. 95–127, at 10 (1977), reprinted in 3 1977 Legislative History of the Clean Air Act Amendments of 1977, at 1450)). The EPA disagrees with commenters' characterization of both this legislative history and the court's opinion in *GenOn*. The legislative history quoted is part of a section titled "General Statement" providing an overview of initiatives and issues informing the Senate Committee's report on the 1977 Clean Air Act Amendments as a whole and is not specific to CAA section 126. Though the EPA agrees it has a fundamental and important role in

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providing technical information and enforcement assistance as part of implementing the Act, the legislative history does not speak to this role specifically in the context of CAA section 126.

Additionally, to the extent the commenter is suggesting that the Third Circuit in GenOn cited to this legislative history to support the interpretation that an investigative burden lies with the EPA in acting on a CAA section 126(b) petition, the EPA disagrees. The court in that case addressed the question of whether the EPA could act on a CAA section 126(b) petition in instances where the Agency had not vet acted on a CAA section 110 SIP addressing interstate transport for the same NAAQS. In this context of determining the appropriate timing of acting on a CAA section 126(b) petition, the court cited this legislative history in pointing out that the EPA, as the federal regulator, was intended to intervene when states failed to adhere to the air pollution control process, and thus the EPA is not obligated to wait for the states to address and resolve interstate transport of pollution through the SIP process before acting on a CAA section 126(b) petition. The court did not speak to who has the *burden* of substantiating a requested finding, particularly when the EPA does not have sufficient information regarding sources named in the petition. Notably, as the Third Circuit discussed, the obligation to act quickly under CAA section 126(b) "petition process is intended to expedite, not delay, resolution of interstate pollution conflicts." GenOn, 722 F.3d at 523 (quoting H.R.Rep. No. 95-294, at 331 (1977), reprinted in 4 1977 Legislative History of the Clean Air Act Amendments of 1977, at 2797). The

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swiftness Congress intended in acting on a CAA section 126(b) petition conflicts with requiring the EPA to acquire and develop new information as part of taking such swift action. Therefore, the legislative history supports the EPA's reasonable interpretation of CAA section 126(b) as placing the burden for substantiating the requested finding on petitioner.

Several commenters also assert that New York met its burden under CAA section 126(b) and that considerations regarding the cost-effectiveness of controls at step 3 are only appropriate under CAA section 126(c), under which the EPA bears the burden to develop a remedy for a finding made under CAA section 126(b). Commenters characterize the EPA's reliance on the D.C. Circuit's decision *New York* as placing the burden on petitioning states to support both findings under CAA section 126(b) and the remedy under CAA section 126(c). According to commenters, the court did not hold that the EPA had no burden to undertake any tasks or analysis within the limited timeframe for action on a CAA section 126(b) petition. Rather, according to commenter, the court only found that the EPA had no affirmative duty to review all existing state implementation plans for a relevant NAAQS and determine if they contained adequate provisions for compliance with each upwind state's good neighbor provision obligations. Commenters additionally state the EPA's prior action on New Jersey's CAA section 126 petition to control emissions from the Portland Generating Station contradicts the EPA's position that it is New York's responsibility as petitioner to analyze and define the remedy.

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The EPA disagrees that, by requiring the petitioner under CAA section 126(b) to provide an analysis of step 3 under CAA section 126(b), it is shifting the burden to petitioners to develop the remedy under CAA section 126(c). As described in Section II.C.1, in examining petitions filed under CAA section 126(b), the EPA has reasonably applied the four-step interstate transport framework used for analyzing whether there is significant contribution to nonattainment, or interference of maintenance of the ozone NAAQS under CAA section 110(a)(2)(D)(i) because those same terms are incorporated into CAA section 126(b). The four-step interstate transport framework includes a multi-factor analysis of the availability of cost-effective controls under step 3. As discussed earlier, this step 3 analysis is an essential part of making the determination of whether sources significantly contribute to nonattainment or interfere with maintenance under the good neighbor provision, and thus whether a finding is justified under CAA section 126(b). While the result of a step 3 analysis can be a quantification of the amount of emissions that constitute the state's significant contribution (or interference with maintenance) under the good neighbor provision, the imposition of a federally enforceable emissions limitation to reduce that amount of emissions does not occur at step 3, but rather occurs under step 4. Thus, the analysis of cost-effective emissions reductions at step 3 is an essential part of making the significant contribution or interference of maintenance finding required under CAA section 126(b).

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Accordingly, the EPA treats the conclusions drawn at step 3 as distinct from the remedy imposed at step 4 under CAA section 110(a)(2)(D)(i)(I), and similarly acknowledges and treats CAA section 126(b) and 126(c) as separate provisions, contrary to commenters suggesting otherwise. In the EPA's regional rulemakings for ozone transport pursuant to CAA section 110, if through the first three steps under the four-step interstate transport framework the EPA has determined there are cost-effective controls available at sources located in upwind states impacting downwind states above a certain threshold, then the EPA has determined that there is significant contribution to nonattainment or interference with maintenance, at which point the Agency imposed federally enforceable emissions limitations on those sources under step 4. For example, at step 3 in the CSAPR Update, the EPA evaluated available NO_X emissions reductions by applying uniform levels of control stringency, represented by cost, in order to quantify the amount of emissions that constituted each upwind state's significant contribution to nonattainment or interference with maintenance and then established NO_X emissions budgets necessary to prohibit that level of emissions. At step 4 in the CSAPR Update, the EPA promulgated federally enforceable allowance trading programs to implement the NO_X emissions budgets calculated under step 3. 81 FR 74504, 74519-21. Notably in the CSAPR Update, by contrast, where the EPA has found a state has no cost-effective controls at step 3, even if the state is linked to downwind impacts under steps 1 and 2, the EPA has not imposed emissions

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limits at step 4. Id. at 74553.⁸⁹ Therefore, to the extent a CAA section 126(b) petition (and the EPA's independent analysis to the extent there is such analysis) applies steps 1, 2, and 3 of the four-step interstate transport framework to successfully show an upwind source, or group of sources, is having downwind impacts in violation of the good neighbor provision, then the EPA would make such a finding under CAA section 126(b) and fulfill its duty under CAA section 126(c) either by imposing the prescribed remedy under subsection (c)(1) (e.g., an existing source must cease operation within 3 months) or by promulgating federally enforceable emissions limitations under subsection (c)(2) to bring the upwind source(s) into compliance with the good neighbor provision. The fulfillment of this obligation by the EPA under CAA section 126(c) is consistent with step 4 of the four-step interstate transport framework, and therefore the EPA is not improperly shifting its burden of developing a remedy to the petitioner under CAA section 126(b). Rather, because the EPA finds that New York as petitioner did not meet its burden under CAA section 126(b) of showing significant contribution to nonattainment or interference with maintenance through application of steps 1 through 3, the EPA did not make the requested finding and, consequently, did not trigger its obligation to impose emissions limitations under CAA section 126(c).

⁸⁹ See also 76 FR 48262 (finding no limits necessary in the District of Columbia to satisfy good neighbor requirements for the 1997 ozone, 1997 PM_{2.5}, or 2006 PM_{2.5} NAAQS because the EPA identified no available cost-effective emissions reductions). Page 142 of 171

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Furthermore, contrary to commenters' assertions, the EPA has not interpreted the D.C. Circuit's holding in *New York* as placing the burden on petitioning states to fully develop the remedy under CAA section 126(c). The EPA acknowledges that the imposition of federally enforceable emissions limitations (analogous to step 4 of the four-step interstate transport framework) is its own obligation under CAA section 126(c). Therefore, the EPA is not relying on the New York decision to support a proposition it does not hold. However, the EPA further disagrees with commenter's narrow reading of New York as simply finding that the EPA had no affirmative duty to review all existing state implementation plans for a relevant NAAQS and determine if they contained adequate provisions for compliance with each upwind state's obligations under the good neighbor provision. While the specific argument the petitioners in New York advanced was that a CAA section 126(b) petition triggered an obligation for the EPA to investigate whether the good neighbor SIPs for all of the states named in the petition are in compliance with CAA section 110(a)(2)(D)(i)(I), the court's logic in addressing this argument applies to the broader question of the EPA's obligation in reviewing a CAA section 126(b) petition. Specifically, the court in New York held that it is reasonable to conclude Congress did not intend for the EPA to undertake a series of procedural and substantive actions to evaluate CAA section 110 SIPs in order to act on a CAA section 126(b) petition, premised on the short 60 day-deadline. 852 F.2d at 578 (holding Congress did not intend for the EPA to be required to

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perform "an entire array of investigative duties" in reviewing a CAA section 126(b) petition). Gathering source-specific information about approximately 350 sources and then conducting a regional cost-effectiveness analysis of them is likely *more* (or at least *as*) burdensome than the review of existing SIPs that the *New York* court said the EPA does not have to do in reviewing a CAA section 126(b) petition. Therefore, the EPA's interpretation of the burden in CAA section 126(b) in this case, as it applies to the time and resources required to conduct a step 3 analysis, is consistent with the interpretation endorsed by the *New York* court.

The EPA also disagrees with commenters' contention that its prior action on a CAA section 126(b) petition from New Jersey regarding SO₂ emissions from the Portland Generating Station in Pennsylvania contradicts the EPA's position in the present action that the burden lies with petitioner to analyze step 3. Rather, as the EPA clearly stated in its proposed response to New Jersey's petition, the EPA first looks to see if the petition identifies or contains a sufficient basis to make the requested finding. The EPA went on to state that, nonetheless, it may decide to conduct independent technical analyses when such analyses are helpful in evaluating the basis for a potential CAA section 126(b) finding or developing a remedy if a finding is made. The EPA invoked this discretion to perform an independent analysis in acting on New Jersey's petition. However, the invocation of such discretion in acting on New Jersey's petition does not contradict the EPA's position that the burden is on the petitioner to provide an analysis under

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step 3. The EPA concluded in the New Jersey action, as it does again here, that the discretionary independent analysis is not compelled by statute. 76 FR 19662, 19666 (April 7, 2011).

Additionally, the EPA disagrees with commenters' assertions that the EPA's past action on New Jersey's CAA section 126(b) petition shows it is now incorrectly conflating CAA section 110(a)(2)(D)(i) with CAA section 126. In analyzing New Jersey's CAA section 126(b) petition and the technical analysis the state submitted in support of the requested finding, the EPA in fact imported similar factors as those outlined in the four-step interstate transport framework used under CAA section 110 to evaluate the petition's analysis contending the identified source was emitting in violation of the good neighbor provision. Furthermore, in acting on New Jersey's petition, the EPA treated step 3 as distinct from step 4. Similar to step 1, the EPA first concluded that based on the petition's technical analysis, the petitioning downwind state had an air quality problem for the 2010 SO₂ NAAQS. Similar to step 2, the Agency determined that, based on the petition's analysis, emissions from the named source in the upwind state alone were sufficient not just to contribute to, but to *cause* a violation of the NAAQS in the petitioning state. As such, the EPA's analysis of the petition's technical showing functionally comprised a step 3 analysis by determining under CAA section 126(b) that the facility should be regulated because of the magnitude of its contribution and the relative lack of other contributing sources. Because the EPA determined that the petition made demonstrations equivalent to steps 1

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through 3 and established that the named source was emitting in violation of the good neighbor provision, the EPA essentially reached step 4 by imposing federally enforceable source-specific rate limits pursuant to CAA section 126(c) to eliminate the source's significant contribution. *See* Final Response to Petition From New Jersey Regarding SO₂ Emissions from the Portland Generating Station, 76 FR 69052 (November 7, 2011).

Information and Analyses Considered Within Step 3

As the EPA interprets the substantive standard under CAA section 126(b) consistent with its interpretation of the good neighbor provision in CAA section 110(a)(2)(D)(i), it is reasonable for the EPA to consider the same type of factors whether evaluating ozone transport in the context of a good neighbor SIP under CAA section 110 or a section 126(b) petition. Thus, based on the EPA's interpretation of CAA section 126(b) as placing the burden on petitioner, the EPA reviewed New York's petition to determine whether it has provided sufficient information to support a determination based on some type of analysis of cost and air quality factors, either the same as or similar to, those that the EPA evaluated in past rulemakings addressing regional ozone transport under the good neighbor provision. The EPA notes that it considered these factors in the NO_X SIP Call, CAIR, CSAPR, and the CSAPR Update, so it was clear that the EPA considers such an analysis to be necessary to determine, under CAA section 126(b), whether upwind sources will significantly contribute to nonattainment or interfere with

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maintenance of the ozone NAAQS in New York. For example, in the CSAPR update, the EPA implemented emissions reductions found to be cost-effective at EGUs (including within the upwind states identified in New York's petition) by the 2017 ozone season, but it did not evaluate potential control strategies available on a longer implementation timeframe or at non-EGUs. 81 FR 74521-22. The EPA has not conducted a regional step 3 analysis for any sources with respect to the 2015 ozone NAAQS, but nonetheless believes consideration of the same type of cost and air quality factors could be reasonable for evaluating upwind state obligations under the good neighbor provision for that standard.

The EPA's review of the petition indicates that New York has not sufficiently developed or evaluated the cost and air quality factors that the EPA has generally relied on in step 3; has not described and conducted any sort of multifactor analysis to determine whether cost-effective controls are available at the named sources considering these factors; and has not provided any alternative analysis that would support a conclusion at step 3 that the named sources will significantly contribute to nonattainment or interfere with maintenance of the NAAQS. The petition, therefore, has not adequately supported its conclusion that the sources named in its petition will significantly contribute to nonattainment or interfere with maintenance of either the 2008 or the 2015 ozone NAAQS. The petition simply applies a uniform approach beginning with a review of the entire anthropogenic emissions inventory and then identifying facilities that

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appear to have larger emissions than other facilities (at least 400 tons of NO_X per year) without supporting why the named facilities either can or should make certain reductions. As the EPA indicated in the proposal, the petition could have included one or more of the following potential analyses to evaluate, compare and identify "significant" emissions from of the named sources, consistent with the EPA's past practice in evaluating regional ozone transport: (i) verifying that the named sources whose emissions are those from the most recent emissions inventory continue to emit NO_X at the same rate or continue to operate; (ii) describing or quantifying potentially available emissions reductions from the named sources (*i.e.*, the control technologies/techniques and the costs of those control technologies/techniques); (iii) describing the downwind air quality impacts of controlling the named sources relative to other sources; or (iv) providing information on the relative cost of the available emissions reductions and whether they are less expensive than other reductions from other sources. In the absence of this or any such similar analyses, the petition has not demonstrated, based on information available at this time, that the sources named in the petition should be required to make further emissions reductions under the good neighbor provision.

The petition also has not demonstrated how to weigh these relevant cost and air quality factors to determine an appropriate level of control for the named sources. Instead, the petition simply asserts that upwind sources should be subject to a comparable level of control as sources

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in downwind states, *i.e.*, the \$5,000/ton level of control sources in New York are subjected to for purposes of RACT. While information regarding costs of controls in the downwind area may be useful when evaluating upwind emissions reduction potential, such information is not determinative of the appropriate level of upwind control. As the EPA explained at proposal, nothing in the text of the good neighbor provision indicates that upwind states are required to implement RACT, which is a requirement that applies to most areas designated nonattainment, see CAA section 172(c)(1) (nonattainment areas generally), 182(b)(2) (ozone nonattainment areas classified as Moderate), nor does the provision require uniformity of control strategies imposed in both upwind and downwind states. Rather, the good neighbor provision indicates that states are required to prohibit those emissions which "contribute significantly to nonattainment" or "interfere with maintenance" of the NAAQS in a downwind state, terms that the Supreme Court has found to be ambiguous. See EME Homer City, 572 U.S. at 489.90 The EPA has always considered cost under the good neighbor provision as part of a multifactor analysis based on the facts and circumstances of the air quality problem at the time of each evaluation, but the EPA has never set upwind control obligations based solely on the level of controls imposed for purposes

⁹⁰ *EME Homer City* also held that the EPA is precluded from requiring more emissions reductions than necessary to address downwind nonattainment and maintenance issues. 572 U.S. at 521-22. The petition also fails to demonstrate that the imposition of RACT-level controls on all named upwind sources will not result in the type of over-control forbidden by the Supreme Court under the good neighbor provision.

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of RACT in downwind nonattainment areas, as the petition suggests the EPA do here. The EPA believes that such a multifactor analysis that considers relevant cost and air quality factors is important for any evaluation of a CAA section 126(b) petition regarding interstate transport of ozone (a regional pollutant with contribution from a variety of sources), as the EPA reviews whether the particular sources identified in the petition should be controlled considering the costs and collective impact of emissions on air quality in the area, including emissions from other anthropogenic sources. The petition fails to conduct any comparable analysis. Review of the named sources in New York's petition may provide a starting point for such an analysis but does not complete the analysis or even provide the type of data that would be necessary for the EPA to conduct such an analysis to determine whether the named sources emit or would emit in violation of the good neighbor provision.

The petition also suggests that upwind sources should be subject to a comparable level of control as sources in downwind states, in part, because it asserts that, while the CSAPR program provides the legal and technical basis for states to eliminate their significant contributions to excessive ozone pollution, the EPA has failed to implement a full, federal-level remedy to completely address the issue of transported ozone, instead issuing EGU NO_X ozone season emissions budgets as a partial remedy for interstate transport for the 2008 ozone NAAQS. The petition asserts that, according to the analyses in the CSAPR Update, after application of the

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rule's NO_X budgets, the EPA's modeling still projected multiple remaining nonattainment and maintenance receptors in the NYMA, including monitoring sites in Fairfield and New Haven Counties in the Connecticut portion of the area, which would continue to project nonattainment in 2017.

While the EPA acknowledged in the CSAPR Update that the FIPs may only be a partial remedy for interstate transport for the 2008 ozone NAAQS, the EPA subsequently promulgated the Determination Rule, in which the EPA concluded that the existing CSAPR Update fully addresses the interstate transport obligations under CAA section 110(a)(2)(D)(i)(I) for the 2008 ozone NAAQS for certain states, including eight of the states named in New York's petition (Illinois, Indiana, Maryland, Michigan, Ohio, Pennsylvania, Virginia and West Virginia), because the downwind air quality problems projected in 2017 would be resolved in 2023. 83 FR 65878 (December 21, 2018). The EPA also approved a SIP from Kentucky which similarly determined that the CSAPR Update FIP would fully satisfy the state's good neighbor obligation with respect to the 2008 ozone NAAQS (83 FR 33730). Thus, the EPA has now determined through this set of actions that the emissions reductions required under the CSAPR Update fully address the good neighbor requirements with respect to the 2008 ozone NAAQS for all the states named in the petition. For the reasons explained in this section, the petition has failed to demonstrate that it is necessary to implement additional, source-specific, unit-level emissions

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limits at any of the sources named in the petition to ensure reductions are being achieved under the CSAPR Update.

Several commenters contend that it is unreasonable to have expected New York to address many of the step 3 considerations that the EPA outlined in the proposal. One commenter claims that the EPA's position that New York's petition needed to provide analyses describing the downwind air quality impacts of controlling the named sources "relative to other sources" is an unreasonable requirement for a CAA section 126(b) petition. The commenter asserts that the need for a comparative demonstration is particularly unreasonable here because the petition already encompasses all large upwind stationary sources collectively linked to New York's downwind nonattainment and/or maintenance problems. The commenter further states that New York has no ability to obtain more specific cost figures for the sources named in the petition. The commenter asserts that the EPA either has such information or can obtain it when developing the remedy under CAA section 126(c).

Another commenter states that the EPA undertook comprehensive EGU and non-EGU control analyses in 2016 as part of its CSAPR Update efforts, which resulted in two detailed TSDs that considered availability of controls, associated costs, and installation times. The EPA further noted in the non-EGU TSD that "the EPA continues to assess the role of NO_x emissions from non-EGU sources to downwind nonattainment problems." The commenter asserts that

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given its authority to gather data, its existing research on both EGU and non-EGU NO_X control technologies, and the 8 months afforded it by the CAA to act on a petition, the EPA has had adequate time to conduct the analysis and define emissions limits for petitioned units that would effectuate the remedy requested by the petition.

The EPA disagrees with the commenters' assertions. As discussed in Section II.C of this notice, the EPA has repeatedly found that ozone transport problems are the result of individually small impacts from numerous sources in upwind states that can have collectively large impacts on downwind ozone concentrations. Apportioning responsibility for emissions reductions across many sources in many states is a key outcome of applying the four-step interstate transport framework, which, considering various cost and air quality factors under step 3, identifies a rational basis for determining that emissions reductions should be required under the good neighbor provision from certain sources rather than others. This source comparison necessarily involves identifying the current operating status of each named facility, the magnitude of emissions from each emitting unit within each named facility, the existing controls on each of these emissions units, additional control options on each emissions unit, the cost of each potential control option, the emissions reductions potential resulting from the installation of controls, and potential air quality impacts of emissions reductions. Without this information, the EPA cannot determine whether the sources named in the New York petition have available or

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cost-effective emissions reductions either as compared to one another or as compared to other, unnamed sources in the same upwind states or in other states. Moreover, the EPA cannot determine whether it would be appropriate to regulate any of the hundreds of sources named in New York's petition without such information.

While the EPA initiated analyses of emissions reduction potential available at EGUs and non-EGUs conducted in support of the CSAPR Update, the analyses were limited in scope, as described in Section II.C. Since finalizing that rule, the EPA has not gathered significant additional information or completed additional analyses regarding the availability of additional controls beyond that which is included in the EGU and non-EGU TSDs identified by the commenter because the EPA has not needed this information to support any current EPAinitiated federal ozone rulemakings. The EPA maintains that the petitioner bears the burden of establishing a technical basis for the specific finding requested and has not done so here.

On the contrary, commenters supporting the petition had the opportunity to, but did not, provide such analyses during the public comment period on the proposed action. Rather, multiple different commenters supporting denial of the petition provided corrections or supplemental information indicating that the operational status and/or emissions information provided in the New York petition were incorrect, further suggesting that granting the petition as to certain units would be unjustified on the facts before the Agency. Generally, commenters opposing the denial

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did not provide information regarding the installation or cost of controls or the potential emissions reductions available. In the absence of such analyses and information, the petition has not demonstrated, based on information available at this time, that the sources named in the petition should be required to make further emissions reductions pursuant to CAA section 126(b). The existence of two EPA technical support documents on controls for EGUs and non-EGUs mentioned by commenters does not contradict this conclusion.

Several commenters contend that the petition adequately met the step 3 requirements because New York demonstrated that there are available, cost-effective emissions reductions from the named upwind sources. Commenters assert that New York has done so by showing that certain named upwind sources that have average emissions rates over 0.15 lb/mmBtu, the emissions rate that is consistent with New York's RACT requirement, and that setting an enforceable NO_X emissions limit equivalent to New York's NO_X RACT requirements at a cost of \$5,000/ton of NO_X reduced could be met in many cases by operating existing controls. Commenters further assert that the EPA has failed to explain why it would not be cost effective to implement NO_X controls at the group of sources identified in the petition. Commenters point to the legislative history of CAA section 126(b) as demonstrating an important part of the impetus to add CAA section 126(b) was to help equalize control costs between upwind and

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downwind states,⁹¹ and state that New York is only seeking to require upwind sources to comply with requirements it already imposes on its own in-state sources.

The EPA disagrees that the petition's proposal that New York's RACT standard be applied to the identified sources provides enough information for the EPA to conclude, at step 3, that each of the sources will significantly contribute to nonattainment or interfere with maintenance in the NYMA. While New York proposes a uniform level of cost and control (at \$5,000/ton and 0.15 lb/mmBtu), neither New York nor the commenters provide an explanation for why that is an appropriate level of control to use to define significant contribution under the good neighbor provision and CAA section 126(b). As discussed earlier, the fact that the sources have a collective impact over an air quality threshold at step 2 does not address whether the sources have cost-effective emissions reductions at step 3.

For example, the petition provides no information demonstrating that the 0.15 lb/mmBtu rate is achievable at all sources, whether at \$5,000 or at other costs. While the commenter

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⁹¹ Specifically, commenters quote the following, "In the absence of interstate abatement procedures, those plants in States with more stringent control requirements are at a distinct economic and competitive disadvantage. [CAA section 126(b)] is intended to equalize the positions of the States with respect to interstate pollution by making a source at least as responsible for polluting another State as it would be for polluting its own State." S.Rep. No. 95–127, at 42 (1977), reprinted in 3 1977 Legislative History of the Clean Air Act Amendments of 1977, at 42).

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suggests that *some* sources might meet that limit through operation of existing controls, neither the commenter nor the petition demonstrates that all of the approximately 350 sources could meet that proposed rate at the proposed \$5,000/ton threshold. Thus, the EPA cannot conclude that the proposed rate is cost-effective for the suite of sources. Moreover, the petition does not identify *which* sources have existing controls that can be operated to meet that rate, meaning the EPA could not even grant the petition as to certain sources without identifying or generating additional information. Furthermore, commenters assert that some of the sources are already meeting the rate, suggesting that even under the petition's own approach that these sources are not significantly contributing to any air quality problems in New York. It is therefore left to the EPA to determine not only which sources have the emissions that constitute the alleged significant contribution, but also which sources the petition even correctly names.

Moreover, a conclusion that the emissions rate proposed by New York is cost-effective at \$5,000 per ton of NO_X removed ignores the critical question of what relevant ozone improvements would be achieved at the downwind area at that cost threshold or considering any other potential control strategies. Determinations about what constitutes reasonably available control technology "evaluat[e] whether implementation of certain controls within a nonattainment area will be effective at addressing a local air quality problem relative to the cost of such controls." 83 Fed. Reg. at 50,470. What controls are required *locally* in nonattainment

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areas is a different question from whether emissions from upwind states, which travel longer distances and have different downwind impacts, "significantly contribute" to downwind nonattainment under the good neighbor provision. As the D.C. Circuit held in *North Carolina,* the good neighbor provision does not permit the EPA to simply "pick a cost for a region and deem 'significant' any emissions that sources can eliminate more cheaply." 531 F.3d at 918. Rather, the EPA must "achieve something measurable toward the goal of prohibiting sources 'within the State' from contributing significantly to downwind nonattainment" and "explain how the objectives in section 110(a)(2)(D)(i)(I) relate to its choice of…emissions caps." In the context of a section 126(b) petition, this is the petitioner's burden in the first instance.

The EPA further disagrees that the cited legislative history supports the petition's and commenters' conclusion that the upwind states should impose controls commensurate with New York's RACT. Although indicating that CAA section 126 was intended to increase the equity between the states with respect to taking responsibility for impacts on air quality problems, nowhere did Congress indicate that upwind states were required to impose the same level of control as downwind states in all cases. If Congress had intended this result, the statute could have been written in this manner. Instead, Congress referenced CAA section 110(a)(2)(D)(i), which also fails to include a specific control level and instead uses the ambiguous terms "significant contribution" and "interference with maintenance" to describe the amount of

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emissions upwind states are required to control, and CAA section 126(b) simply incorporated that standard.

Moreover, the concept of "equity" is particularly difficult to define in the context of ozone transport, given that downwind ozone concentrations are affected by individually small impacts from emissions of hundreds and thousands of sources. First, as to the number of sources potentially impacted, states with nonattainment areas are generally required to implement RACT at major sources located only within the boundaries of the nonattainment area or within the Ozone Transport Region (OTR). However, the petition's and commenters' argument suggests that the same controls should be imposed on *all* major sources throughout upwind states so long as the state has a linkage at or above the step 2 threshold⁹² – a much higher burden than the statute imposes on local emissions within the home state of a nonattainment area.⁹³ Second,

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⁹² Notably, the factors used to identify areas *contributing* to a measured violation in the designation process are more complex than the simple air quality threshold used in the EPA's four-step interstate transport framework. In-state sources are not necessarily subject to RACT based solely on a similarly low air quality impact.

⁹³ The EPA recognizes that states like New York are required, as members of OTR, to impose RACT at major sources statewide, but commenters have not argued that the good neighbor provision requires incorporation of OTR level controls in any state impacting a downwind air quality problem; nor could they. The statute provides a separate provision at CAA section 176A for determining whether it is appropriate to add additional states to the OTR and thus subject them to the additional requirements applicable to such states. The EPA already considered and rejected a petition submitted under this provision to expand the OTR and subject more states to these requirements, which the D.C. Circuit affirmed. *New York v. EPA*, 921 F.3d 257 (D.C. Circ.

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there is no uniform threshold for determining what rate and cost represent RACT. The process for identifying RACT considers a variety of factors and can vary from nonattainment area to nonattainment area, from state to state, and indeed from source to source. Thus, it is not necessarily "equitable" to rely on a single state's conclusion as to what constitutes RACT for its mix of sources in order to define "significant contribution" for a suite of different sources in numerous distant upwind states. Rather, as the Supreme Court concluded, the EPA's use of cost to evaluate different types of control strategies and select a level of control for a region is itself "equitable," and achieves the intention reflected in the legislative history, because it "subjects to stricter regulation those States that have done relatively less in the past to control their pollution." *EME Homer City*, 572 U.S. at 519.

One commenter asserts that data indicate that certain facilities named in New York's CAA section 126(b) petition could be controlled. Specifically, the commenter notes that the Brunner Island Power Plant completed installation of a natural gas line in 2017, but that 2018 emissions data reveal the facility fired coal on approximately 32 days in the ozone season, of which nine were days when the ozone standard was exceeded in New York State. The

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^{2019).} Congress's decision to include only certain states in the OTR was an acknowledgement that there might be inequities.

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commenter further notes that the EPA found in denying Maryland and Delaware's CAA section 126(b) petitions that the CSAPR Update was controlling emissions from the EGUs named in the petition and from EGUs collectively in the named upwind states that impact ozone concentrations in Maryland and Delaware. But 2018 ozone season emissions data from those sources (also named in New York's petition) reveal that NOx emissions continue to exceed the levels that would have resulted if existing controls were operated as the EPA assumed in the modeling for the Determination Rule (at a 0.10 lb/mmBtu rate). The commenter provides data for the units named in the Maryland and Delaware petitions intended to demonstrate that they could have reduced NOx emissions over the course of the ozone season using the 0.15 lb/mmBtu rate requested in New York's petition, while also noting that several units already meet or approach that limit.

The commenter asserts that additional facilities in New York's petition have similarly been operating with 2018 ozone season NO_X emissions rates higher than the requested 0.15 lb/mmBtu rate, even though "state-of-the-art" emissions controls are widely available and assumed by the EPA to be installed in its 2023 modeling. The comment provides a table with data for six individual sources, intended to provide a representative sample of the unoptimized facilities across the region, and then cites to the CSAPR Update where the EPA said that "stateof-the-art combustion controls such as low-NO_X burners and over-fire air can be installed

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quickly" and at an estimated cost of installation of only \$500 to \$1,200 per ton of NO_X removed. The commenter asserts that an analysis of emissions data reveals that if facilities were to operate at a 0.15 lb/mmBtu NO_X rate, they would have each reduced their NO_X emissions by over 100 tons, considering only the days during the 2018 ozone season in which New York monitors exceeded the NAAQS.

The EPA disagrees with the commenter's assertion that there is sufficient information to grant the petition as to the sources identified in New York's petition. As an initial matter, simply providing data regarding how individual units operated in 2018, including those units named in the prior Delaware and Maryland CAA section 126(b) petitions, does not demonstrate either that the units are able to achieve the 0.15 lb/mmBtu rate proposed by the New York petition or, to the extent this is technically achievable, that the measures necessary for the sources to operate at that rate would be cost-effective considering the types of factors the EPA typically evaluates in step 3 of the four-step interstate transport framework. In fact, the commenter concedes that certain units for which it provides data already meet the proposed limit, which further undermines any conclusion that these units should be further controlled under CAA section 126(b).

The EPA further notes, as it did in its denial of the Delaware and Maryland petitions, that the EPA has already taken regulatory action to control emissions from the sources noted in the

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comment.⁹⁴ As described in the CSAPR Update (81 FR 74540-41), control strategies involving turning on and fully operating existing SCR control equipment and installing state-of-the-art combustion controls were accounted for in setting state budgets to address the good neighbor requirements for the 2008 ozone NAAQS for states in the eastern U.S.⁹⁵ Recent measured emissions data suggest that those emissions reductions were either successfully achieved at the particular units, or commensurate reductions were achieved from other units within the state, as demonstrated by all states meeting the state budgets (accounting for the year-to-year variability associated with the assurance levels) and relatively low emissions rates seen at large numbers of units across the region (see Excel documents titled,

"2017_csapr_budgets_emissions_and_assurance_levels_11-1-18_3.xlsx",

"2018_csapr_assurance_provision_0.xlsx", and "2017 NO_X Rates for 274 coal units" in the

docket for this action for additional details).⁹⁶

The EPA notes that the petitioner and commenters have provided some unit-level emissions data for a few units (see comment available at EPA-HQ-OAR-2018-0170-0084,

⁹⁶ 2017 CSAPR Budgets Emissions and Assurance Levels Spreadsheet and 2017 CSAPR Budgets Emissions and Assurance Levels Spreadsheet available in the docket and at *https://www.epa.gov/csapr/csapr-assurance-provision*.

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⁹⁴ See 83 FR 50464-70.

⁹⁵ See the CSAPR Update technical support document, EGU NO_x Mitigation Strategies Final Rule TSD for additional details.

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Tables 1 and 2) showing some daily emissions rates exceeding the commenter's proposed 0.15 lb/mmBtu rate. However, the fact that a source may have higher emissions on a particular day is not determinative of whether a unit is not fully operating its control equipment and can achieve a lower rate, as there are many reasons why lower rates may not always be achievable on every day (*e.g.*, at low hourly utilization rates there are engineering limitations for flow and temperature for an SCR to operate, *see* Short-Term Emissions Limits Document in the docket for this action for additional details). Similarly, based on unit configuration, technical engineering design efficiency, and the exact nature of the fuel utilized, not all combustion control or post-combustion control equipment is technically capable of achieving a best emissions rate, or fleet-average best rate, under all operating conditions.⁹⁷

As noted by the commenter, the EPA has explained that certain combustion controls (*e.g.*, low- NO_X burners (LNB) and over-fire air) can be installed quickly and at costs of \$500 to \$1,200 tons on average, neither the petition nor the commenter has demonstrated that there are emissions reductions achievable from these strategies at all the units named in the petition. Rather, as shown in the CSAPR Update Rule EGU NO_X Mitigation Strategies TSD, there is limited EGU reduction potential in the CSAPR Update region (including all states named in the

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⁹⁷ See National Electric Energy Data System excel document in the docket.

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petition) as most sources have already installed state of the art combustion controls.⁹⁸ Moreover, these controls may, or may not, be able to achieve the rate identified by the commenter of 0.15 lb/mmBtu, and even for those that can the unit-specific cost may not match the fleetwide average cost discussed earlier. The commenter's calculations of alleged emissions reduction potential from meeting the proposed rate ignore unit-specific technical considerations and corresponding cost by assuming that all facilities could have lowered emissions to a 0.15 lb/mmBtu NO_X emissions rate through combustion control upgrade or post-combustion control optimization. The commenter does not present complete engineering and cost analysis that speaks to whether these units can, and cost-effectively, operate at the proposed level. Moreover, they do not explain how any potential reductions identified at these sources are more cost-effective than mitigation efforts at other upwind sources.

Commenters also misconstrue the EPA's use of 0.10 lb/mmBtu as a rate ceiling rather than a fleet-average when discussing the assumptions underlying the modeling used in the Determination Rule. The EPA specifically noted that 0.10 lb/mmBtu was representative of a fleet-average for units that were not already operating their controls prior to the implementation of the CSAPR Update. It did not reflect a unit-level rate ceiling or cut-off for SCR operation at all units. In the CSAPR Update, the EPA determined that, based on an aggregation of unit-level

⁹⁸ See EGU NO_X Mitigation Strategies Final Rule Technical Support Document, August 2016. Page 165 of 171

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emissions rates, an average fleet-wide emissions rate of 0.10 lb/mmBtu would represent the optimized operation of SCR controls that were not already being operated and optimized, and set statewide emissions budgets based on this assumption. 81 FR 74543. In concluding that this rate would be appropriate for calculating emissions reduction potential from implementation of this control strategy, the EPA recognized that some units would have optimized rates above that level and some below that level. 81 FR 74543. Thus, the fact that some units are operating above 0.10 lb/mmBtu is not indicative that the sources have additional cost-effective emissions reductions available.

Thus, although the petition and the commenter have identified certain sources operating at rates higher than that proposed by New York in its petition, this is not sufficient information to demonstrate that the sources can or should be further controlled, and thus does not support a finding that such sources significantly contribute to nonattainment or interfere with maintenance of either the 2008 or 2015 ozone NAAQS in New York.

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Conclusion

For the reasons described in this section, the EPA is finalizing a determination that material elements in New York's assessment of step 3 are insufficient, such that the EPA cannot conclude that any source or group of sources in any of the named states will significantly contribute to nonattainment or interfere with maintenance in Chautauqua County or the NYMA relative to the 2008 and 2015 ozone NAAQS. Thus, the EPA is finalizing its denial of the petition as to all named sources in all the named upwind states because New York has not met its burden to demonstrate that the sources emit or would emit in violation of the good neighbor provision with respect to either the 2008 or 2015 ozone NAAQS. Although the EPA already has identified a sufficient basis to deny the petition as to Chautauqua County (for the 2008 and 2015 ozone NAAQS) and NYMA (for the 2008 ozone NAAQS) at step 1 of the four-step interstate transport framework, the EPA is also relying on our assessment of step 3 as an additional and independent basis for denial as to the petition's claims for these areas.

4. Group of Stationary Sources

The EPA does not need, in this final action, to make any finding or determination for New York's CAA section 126(b) petition with respect to the scope of "group of stationary sources." In the proposal, the EPA solicited comment on whether to deny New York's petition based on the petition's insufficient justification that such a large, undifferentiated number of

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sources located in numerous upwind states constituted a "group of stationary sources" within the context of CAA section 126(b). The proposal offered that a "group of stationary sources" could mean stationary sources within a geographic region, sources identified by a specific North American Industry Classification System (NAICS) Code, sources emitting over a defined threshold and/or any combination of these or other defining characteristics. The EPA received comments both supporting and opposing a petition denial based on whether the petition adequately demonstrated that the sources identified in the petition constitute a "group of stationary sources." Based on the other bases for denial, the EPA does not need to reach the question of whether the petitioners' failed to sufficiently justify its interpretation of a "group of stationary sources" but notes that the absence of supporting information for such a determination makes the Agency unlikely to side with petitioners on the information provided.

IV. Determinations Under CAA Section 307(b)(1) and (d)

Section 307(b)(1) of the CAA indicates which Federal Courts of Appeal have venue for petitions of review of final actions by the EPA. This section provides, in part, that petitions for review must be filed in the Court of Appeals for the District of Columbia Circuit if: (i) the Agency action consists of "nationally applicable regulations promulgated, or final action taken, by the Administrator;" or (ii) such action is locally or regionally applicable, but "such action is

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based on a determination of nationwide scope or effect and if in taking such action the Administrator finds and publishes that such action is based on such a determination."

To the extent a court finds this action to be locally or regionally applicable, the EPA has found that this action is based on a determination of "nationwide scope and effect" within the meaning of CAA section 307(b)(1). This action addresses emissions impacts from sources located in nine states, located in multiple EPA Regions and federal judicial circuits. This final action is also based on a common core of factual findings and analyses concerning the transport of pollutants between the different states.

For these reasons, to the extent a court finds this action to be locally or regionally applicable, the Administrator has determined that this final action is based on a determination of nationwide scope and effect for purposes of CAA section 307(b)(1). Thus, pursuant to CAA section 307(b), any petitions for review of this final action must be filed in the Court of Appeals for the District of Columbia Circuit within 60 days from the date such final action is published in the *Federal Register*.

In addition, pursuant to sections 307(d)(1)(N) and 307(d)(1)(V) of the CAA, the Administrator has determined that this action is subject to the provisions of CAA section 307(d). CAA section 307(d)(1)(N) provides that section 307(d) applies to, among other things, "action of the Administrator under CAA section 126 of this title (relating to interstate pollution

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abatement)." 42 U.S.C. 7407(d)(1)(N). Under CAA section 307(d)(1)(V), the provisions of CAA

section 307(d) also apply to "such other actions as the Administrator may determine." 42 U.S.C.

7407(d)(1)(V). The Agency has complied with procedural requirements of CAA section 307(d)

through this rulemaking effort.

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V. Statutory Authority

42 U.S.C. 7410, 7426, 7601.

Dated:

Andrew R. Wheeler, Administrator.

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