The EPA Administrator, Andrew R. Wheeler, signed the following notice on 5/6/2019, and EPA is submitting it for publication in the *Federal Register* (FR). While we have taken steps to ensure the accuracy of this Internet version of the rule, it is not the official version of the rule for purposes of compliance. Please refer to the official version in a forthcoming FR publication, which will appear on the Government Printing Office's govinfo website (https://www.govinfo.gov/app/collection/fr) and on Regulations.gov (https://www.regulations.gov) in Docket No. EPA-HQ-OAR-2018-0170. Once the official version of this document is published in the FR, this version will be removed from the Internet and replaced with a link to the official version.

6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

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

RIN 2060-AU04

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

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of Proposed Action on Petition.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to deny a Clean Air Act (CAA or Act) section 126(b) petition submitted by the state of New York on March 12, 2018. The petition requests 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 prohibition of CAA section 110(a)(2)(D)(i)(I), also referred to as the good neighbor provision. The EPA proposes to deny the petition because New York has not met its statutory burden to demonstrate that the group of identified sources emits or would emit in violation of the good neighbor provision for the 2008 or 2015 ozone NAAQS in Chautauqua County and the NYMA. With respect to Chautauqua County, the EPA is first proposing to deny the petition based on the conclusion that the petition has not identified, and the EPA has not independently found, relevant air quality problems with respect to either the 2008 or the 2015 ozone NAAQS, and, thus, the group of identified sources neither emits nor would emit pollution in violation of the good

neighbor provision with respect to these standards. With respect to the NYMA, the EPA is similarly proposing to deny the petition based on the conclusion that the petition has not identified, and the EPA has not independently found, relevant air quality problems with respect to the 2008 NAAQS and, thus, the group of identified sources neither emits nor would emit pollution in violation of the good neighbor provision with respect to this standard. With respect to both NAAQS and both areas, the EPA is additionally proposing to find 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, the petition does not demonstrate that the group of identified sources either emits or would emit pollution in violation of the good neighbor provision.

DATES: Comments. Comments must be received on or before July 15, 2019.

Public hearing: The EPA will hold a public hearing on this proposal on June 11, 2019, in Washington D.C. Please refer to **ADDRESSES** for additional information on the comment period and public hearing.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2018-0170, at http://www.regulations.gov. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (e.g., on the Web, Cloud, or other

file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit http://www2.epa.gov/dockets/commenting-epa-dockets. Certain other material, such as copyrighted material, will not be placed on the Internet but may be viewed, with prior arrangement, at the EPA Docket Center. Publicly available docket materials are available either electronically in www.regulations.gov or 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.

Public hearing: The June 11, 2019, public hearing will be held at the EPA, William Jefferson Clinton East Building, Room 1117A, 1201 Constitution Avenue, NW, Washington, DC 20004. The public hearing will convene at 9:00 a.m. and end at 6:00 p.m. Eastern Time (ET) or 1 hour after the last registered speaker has spoken. The EPA will make every effort to accommodate all individuals interested in providing oral testimony. A lunch break is scheduled from 12:00 p.m. until 1:00 p.m. Please note that this hearing will be held at a U.S. government facility. Individuals planning to attend the hearing should be prepared to show valid picture identification to the security staff to gain access to the meeting room. The REAL ID Act, passed by Congress in 2005, established new requirements for entering federal facilities. These requirements took effect July 21, 2014. If your driver's license is issued by American Samoa, you must present an

additional form of identification to enter the federal building where the public hearing will be held. Acceptable alternative forms of identification include: federal employee badges, passports, enhanced driver's licenses and military identification cards. For additional information for the status of your state regarding REAL ID, go to http://www.dhs.gov/real-id-enforcement-brief. In addition, you will need to obtain a property pass for any personal belongings you bring with you. Upon leaving the building, you will be required to return this property pass to the security desk. No large signs will be allowed in the building, and demonstrations will not be allowed on federal property for security reasons.

If you would like to present oral testimony at the hearing, please notify Ms. Pamela Long, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Air Quality Policy Division, (C504-01), Research Triangle Park, NC 27711, telephone (919) 541-0641, fax number (919) 541-5509, email address *long.pam@epa.gov*, no later than 4:00 p.m. ET on June 7, 2011. Ms. Long will arrange a general time slot for you to speak. The EPA will make every effort to follow the schedule as closely as possible on the day of the hearing.

Oral testimony will be limited to 5 minutes for each commenter. The EPA encourages commenters to provide the EPA with a copy of their oral testimony electronically (via email) or in hard copy form. Commenters should notify Ms. Long if they need specific translation services for non-English speaking commenters.

The hearing schedule, including the list of speakers, will be posted on the EPA's Web at site https://www.epa.gov/ozone-pollution/ozone-national-ambient-air-quality-standards-naaqs-section-126-petitions prior to the hearing. Verbatim transcripts of the hearing and written statements will be included in the docket for the action.

The public hearing will provide interested parties the opportunity to present data, views

Page 4 of 68

or arguments concerning the EPA's proposed response to the petition from New York. The EPA may ask clarifying questions during the oral presentations but will not respond to the presentations at that time. Written statements and supporting information that are submitted during the comment period will be considered with the same weight as any oral comments and supporting information presented at the public hearing. Written comments must be postmarked by the last day of the comment period.

FOR FURTHER INFORMATION CONTACT: For additional information regarding this proposed action, please contact: 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*. For information on the public hearing or to register to speak at the hearing, contact Ms. Pamela Long, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Air Quality Planning Division, Mail Code C504-01, Research Triangle Park, NC 27711, telephone (919) 541-0641, fax number (919) 541-5509, email at *long.pam@epa.gov* (preferred method for registering).

SUPPLEMENTARY INFORMATION:

The information in this document is organized as follows:

- I. General Information
- II. Executive Summary of the EPA's Proposed Decision on the CAA Section 126(b) Petition from New York
- III. Background and Legal Authority
 - A. Ground-level Ozone and the Interstate Transport of Ozone
 - B. CAA Sections 110 and 126
 - C. The EPA's Historical Approach to Addressing Interstate Transport of Ozone under the Good Neighbor Provision
 - D. The CAA Section 126(b) Petition from New York
- IV. The EPA's Proposed Decision on the CAA Section 126(b) Petition from New York
 - A. The EPA's Approach for Granting or Denying CAA Section 126(b) Petitions Regarding the 2008 and 2015 8-hour Ozone NAAQS

- B. The EPA's Evaluation of Whether the Petition is Sufficient to Support a CAA Section 126(b) Finding
- V. Conclusion
- VI. Judicial Review
- VII. Statutory Authority

I. General Information

Throughout this document wherever "we," "us," "our" or "Agency" is used, we mean the United States (U.S.) EPA.

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

The EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2018-0170 (available at http://www.regulations.gov). The EPA has made available information related to the proposed action and the public hearing at Web site: https://www.epa.gov/ozone-pollution/ozone-national-ambient-air-quality-standards-naaqs-section-126-petitions.

II. Executive Summary of the EPA's Proposed 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 over 350 facilities in nine states significantly contribute to nonattainment and/or interfere with maintenance of the 2008 and 2015 ozone NAAQS in violation of CAA section 110(a)(2)(D)(i)(I), otherwise known as the good neighbor provision. For the reasons explained in this notice, the EPA is proposing to deny the petition because New York has not met 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 in either Chautauqua County or the NYMA.

The EPA is evaluating the petition consistent with the same four-step interstate transport framework that the EPA has used in previous regulatory actions addressing regional ozone

Page 6 of 68

transport problems. The EPA is, therefore, using this framework to evaluate whether the petition meets the standard to demonstrate under CAA section 126(b) that the sources emit or would emit in violation of the good neighbor provision. The EPA's proposed 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 proposing to deny 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 has not identified, and the EPA has not independently found, relevant air quality problems. With respect to the 2008 ozone NAAQS in the NYMA, the EPA is similarly proposing to deny the petition based on the conclusion that the petition has not identified, and the EPA has not independently found, relevant air quality problems. Thus, the EPA is proposing to find as to these areas and NAAQS that the petition has not met its burden at step 1 of the four-step interstate transport framework. Thus, the group of identified sources neither emits nor would emit pollution in violation of the good neighbor provision. With respect to the 2015 ozone NAAQS in the NYMA, the EPA has identified a relevant downwind air quality problem, and, thus, the EPA is not proposing a denial at step 1 as to this portion of the petition.

The EPA is additionally proposing to deny the petition as to all areas and 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 is proposing to find 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 has not met 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. As to the claims in the petition regarding Chautauqua County (for both NAAQS) and the NYMA (for the 2008 ozone NAAQS), this provides an independent basis for denial in addition to the proposed denial under step 3. The EPA is taking comment on whether to also deny the petition because the petitioner has not provided justification for the proposition that 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).

Section III of this notice provides background 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) and provides a summary of the relevant issues raised in New York's CAA section 126(b) petition. Section IV of this notice details the EPA's proposed action to deny the petition, including an explanation of the EPA's approach for granting or denying CAA section 126(b) petitions regarding the 2008 and 2015 8-hour ozone NAAQS and the EPA's evaluation of the sufficiency of New York's petition, identifying technical insufficiencies in the petition and explaining how the EPA's own analysis informs its evaluation of the claims in the petition.

III. Background and Legal Authority

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 parts per billion (ppb). On October 1, 2015, the EPA further revised the ground-level ozone NAAQS to 70 ppb. 2

In this proposal, consistent with previous rulemakings described in Section III.C.2, the EPA relies on analyses that reflect the regional nature of transported ground-level ozone pollution. Ground-level ozone is not emitted directly into the air but is a secondary air pollutant created by chemical reactions between nitrogen oxides (NO_X), carbon monoxide (CO), methane (CH₄), and non-methane volatile organic compounds (VOCs) in the presence of sunlight. Emissions from mobile sources, electric generating units (EGUs), industrial facilities, gasoline vapors, and chemical solvents are some of the major anthropogenic sources of ozone precursors. The potential for ground-level ozone formation increases during periods with warmer temperatures and stagnant air masses. Therefore, ozone levels are generally higher during the

¹ See National Ambient Air Quality Standards for Ozone, Final Rule, 73 FR 16436 (March 27, 2008).

² See National Ambient Air Quality Standards for Ozone, Final Rule, 80 FR 65292 (October 26, 2015).

summer months.^{3,4} Ground-level ozone concentrations and temperature are highly correlated in the eastern U.S., with observed ozone increases of 2-3 ppb per degree Celsius reported.⁵

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 U.S. 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 high concentrations of ozone pollution.⁶

The EPA concluded in several previous rulemakings (summarized in Section III.C.2) that interstate ozone transport can be an important component of peak ozone concentrations during the summer ozone season and that NO_X control strategies are effective for reducing regional-scale ozone transport. Model assessments have looked at impacts on peak ozone concentrations after potential emissions reduction scenarios for NO_X and VOCs for NO_X-limited and VOC-limited areas. For example, Jiang and Fast concluded that NO_X emissions reduction strategies are

³ Rasmussen, D.J. et al. (2012). Surface ozone-temperature relationships in the eastern US: A monthly climatology for evaluating chemistry-climate models. Atmospheric Environment 47: 142-153.

⁴ High ozone concentrations have also been observed in cold months, where a few areas in the western U.S. have experienced high levels of local VOC and NO_X emissions that have formed ozone when snow is on the ground and temperatures are near or below freezing.

⁵ Bloomer, B.J., J. W. Stehr, C.A. Piety, R. J. Salawitch, and R. R. Dickerson (2009). Observed relationships of ozone air pollution with temperature and emissions, Geophys. Res. Lett., 36, L09803.

⁶ 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.

effective in lowering ozone mixing ratios in urban areas and Liao et al. showed that NO_X reductions result in lower peak ozone concentrations in non-attainment areas in the Mid-Atlantic. ^{7,8}

Studies have found that NO_X emissions reductions can be effective in reducing ozone pollution as quantified by the form of the 2008 ozone standard (8-hour peak concentrations). Specifically, studies have found that NO_X emissions reductions from EGUs, mobile sources, and other source categories can be effective in reducing the upper-end of the cumulative ozone distribution in the summer on a regional scale. Analysis of air quality monitoring data trends shows reductions in summertime ozone concurrent with implementation of NO_X reduction programs. Gilliland et al. examined the NO_X State Implementation Plan (SIP) Call, I discussed in more detail in Section III.C.2, and presented reductions in observed versus modeled ozone concentrations in the eastern U.S. downwind from major NO_X sources. The results showed significant reductions in ozone concentrations (10-25 percent) from observed measurements

⁷ Jiang, G.; Fast, J.D. (2004). Modeling the effects of VOC and NO_X emissions sources on ozone formation in Houston during the TexAQS 2000 field campaign. Atmospheric Environment 38: 5071-5085.

⁸ Liao, K. et al. (2014) Impacts of interstate transport of pollutants on high ozone events over the Mid-Atlantic United States. Atmospheric Environment 84: 100–112.

⁹ Hidy, G.M. and Blanchard C.L. (2015). Precursor reductions and ground-level ozone in the Continental United States. J. of Air & Waste Management Ass'n 65, 10.

¹⁰ Simon, H. et al. (2015). Ozone trends across the United States over a period of decreasing NO_X and VOC emissions. Environmental Science & Technology 49, 186-195.

¹¹ 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 (NOx SIP Call). 63 FR 57356 (October 27, 1998).

¹² Gilliland, A.B. et al. (2008). Dynamic evaluation of regional air quality models: Assessing changes in O₃ stemming from changes in emissions and meteorology. Atmospheric Environment 42: 5110-5123.

(CASTNET and AQS)¹³ between 2002 and 2005, linking reductions in EGU NO_X emissions from upwind states with ozone reductions downwind of the major source areas. ¹⁴ Additionally, Gégo et al. showed that ground-level ozone concentrations were significantly reduced after implementation of the NO_X SIP Call. 15 Thus, these studies support the EPA's continued focus on regional and seasonal NOx control strategies to address regional interstate ozone pollution transport.

В. CAA Sections 110 and 126

The statutory authority for this action is provided by CAA sections 126 and 110(a)(2)(D)(i). Section 126(b) of the CAA provides, among other things, that any state or political subdivision may petition the Administrator of the EPA to find that any major source or group of stationary sources in an upwind state emits or would emit any air pollutant in violation of the prohibition of CAA section 110(a)(2)(D)(i), referred to as the good neighbor provision of the Act. 16 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.

¹³ CASTNET is the EPA's Clean Air Status and Trends Network. AQS is the EPA's Air Quality System.

¹⁴ Hou, Strickland & Liao (2015). Contributions of regional air pollutant emissions to ozone and fine particulate matter-related mortalities in eastern U.S. urban areas. Environmental Research 137: 475-484.

¹⁵ Gégo et al. (2007). Observation-based assessment of the impact of nitrogen oxides emission reductions on O₃ air quality over the eastern United States. J. of Applied Meteorology and Climatology 46: 994-1008.

¹⁶ The text of CAA section 126 as codified in the U.S. Code cross-references section 110(a)(2)(D)(ii) instead of section 110(a)(2)(D)(i). The courts have confirmed that this is a scrivener's error and the correct cross-reference is to CAA section 110(a)(2)(D)(i). See Appalachian Power Co. v. EPA, 249 F.3d 1032, 1040–44 (D.C. Cir. 2001).

CAA section 126(c) 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 other state with respect to that NAAQS. As described further in Section III.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, Determination Regarding Good Neighbor Obligations for the 2008 Ozone National Ambient Air Quality Standard (the Determination Rule), finalized a determination that the existing Cross-

State Air Pollution Rule Update for the 2008 Ozone NAAQS (CSAPR Update)¹⁷ 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 insuring 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 states and the EPA have historically addressed the interstate transport of ozone pursuant to the good neighbor provision by promulgating rulemakings that employ regional trading programs to reduce NO_X emissions. Each of these rulemakings followed a similar four-step interstate transport framework to evaluate 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

Page 14 of 68

¹⁷ See Cross-State Air Pollution Rule Update for the 2008 Ozone National Ambient Air Quality Standards, Final Rule, 81 FR 74504 (October 26, 2016).

pollution emitted by multiple upwind sources located in different upwind states combined with downwind (*i.e.*, locally generated) ozone.

1. Description of the Four-Step Interstate Transport Framework

Through the development and implementation of several previous rulemakings,¹⁸ the EPA, working in partnership with states, 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 maintaining the NAAQS</u>. The EPA historically identified downwind areas with air quality problems, or 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 neighbor provision. 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 to be those modeled to contribute at or above a 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 maintenance of a standard at a receptor in another state. In the EPA's prior rulemakings for

¹⁸ 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).

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 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. ¹⁹ In addition, the EPA has also offered states the opportunity to participate in comparable EPA-operated 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 sources are actually linked 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 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

¹⁹ 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 and argues for in its petition.

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). 20 The NO_X SIP Call was the result of the 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 NO_X 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 ultimately

²⁰ 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. 40 CFR 51.121(q). The EPA recently finalized an action rescinding the 1997 ozone NAAQS as a basis for the NO_X SIP Call. 84 FR 8422 (March 8, 2019). Page 17 of 68

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 northeastern states regarding the same air quality issues addressed by the NO_X SIP Call, specifically interstate ozone transport for the 1979 ozone NAAQS. These CAA section 126(b) petitions asked the EPA to find that ozone emissions from numerous sources located in 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 over the NO_X SIP Call led the EPA to "de-link" the CAA section 126(b) petition response from the NO_X SIP Call, and the EPA made final CAA section 126(b) findings for 12 states 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 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 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 NO_X 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*, 531 F.3d at 929. 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 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 trading programs to reduce statewide emissions levels. ²¹ 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.*, 134 S. Ct. 1584, 1607-09 (2014) (*EME Homer City*). ²²

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

²¹ 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.

²² 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.

ozone pollution from 22 states in the eastern U.S. to widespread downwind air quality problems. 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. ²³ 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 2017 ozone season and 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.

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, Virginia and West Virginia). The EPA stated that, based on its analysis at that time, the emissions reductions required by the rule "may not be all that is needed" to address transported emissions. ²⁴ 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

²³ 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).

²⁴ 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).

above the one-percent threshold. 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 NO_X reductions and further EGU control strategies (*i.e.*, the implementation of new post-combustion controls) that were achievable on timeframes extending beyond the 2017 analytic year.

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 Update fully addresses the good neighbor provision requirements for the 2008 ozone NAAQS 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 of the four-step framework, 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 NAAQS. 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).

Most recently, the EPA acted on five CAA section 126(b) petitions submitted by the states of Delaware and Maryland regarding various sources in five upwind states with regard to the 2008 and 2015 ozone NAAQS. 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 50444 (October 5, 2018).

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

On March 12, 2018, 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 New York State, specifically in the New York-Northern New Jersey-Long Island, NY-NJ-CT area (hereafter the New York metropolitan area or NYMA) and in Chautauqua County in western New York.

 The petition asserts that Chautauqua County and the NYMA have an air quality problem for the 2008 and the 2015 ozone NAAQS.

The petition explains that the EPA designated the Chautauqua County area (*i.e.*, Jamestown, New York) as Marginal nonattainment for the 2008 ozone NAAQS and that the area attained the NAAQS by the Marginal area attainment date of July 20, 2015. The petition asserts, however, that the area remains in danger of exceeding the ozone NAAQS, particularly the 2015 standard.

The petition also explains that the EPA designated the NYMA as Marginal nonattainment for the 2008 ozone NAAQS. The NYMA failed to attain the NAAQS by the Marginal attainment Page 24 of 68

deadline of July 20, 2015, and the EPA subsequently reclassified the area to a Moderate nonattainment area on June 3, 2016.²⁵ The petition further asserts that all three states in the 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 ppb. The petition, thus, concludes that the area will likely be designated nonattainment for the 2015 ozone NAAQS.²⁶

2. The petition asserts that NO_X transport from the nine named states impacts air quality in New York State.

The petition identifies nine states that were linked to air quality problems in New York in the EPA's 2017 contribution modeling in the CSAPR Update based on impacts equal to or greater than the threshold of one percent of the 2008 NAAQS (or 0.75 ppb or more): Illinois, Indiana, Kentucky, Maryland, Michigan, Ohio, Pennsylvania, Virginia and West Virginia. The petition also asserts that the high concentrations of ozone that are transported to New York are largely the result of emissions from major stationary sources of NO_X located in the linked states. The petition cites efforts by New York and other parties to mitigate regional transport of NO_X,

²⁵ The EPA notes that New York submitted its CAA section 126(b) petition before the EPA proposed to reclassify the NYMA as a Serious nonattainment area. 83 FR 56781 (November 14, 2018).

²⁶ The petition asserts that 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 as a Moderate nonattainment area, the same as the NYMA nonattainment area for 2008 ozone NAAQS. 83 FR 25776 (June 4, 2018).

including implementation of the NO_X Budget Trading Program under the NO_X SIP Call and the CSAPR allowance trading programs.

Additionally, 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.²⁷ The petition concludes that, given the absence of major sources in the Chautauqua County area, reductions in ozone precursor emissions are needed from upwind states, especially from sources in Illinois, Indiana, Kentucky, Michigan, Ohio, and Virginia.

 The petition asserts that facilities emitting (or projected to emit) above 400 tons of NO_X significantly contribute to air quality problems or interfere with maintenance in New York State.

When analyzing significant ozone contributions, the petition considers the highest emitting facilities from the previously named linked states. Specifically, the petition identifies EGU and non-EGU facilities emitting, or projected to emit, 400 tons per year or more of NO_X in each of these linked states and asserts that these facilities are expected to have the greatest impact on the ability of the NYMA and Chautauqua County to attain and maintain the 2008 and

²⁷ 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 four 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).

2015 NAAQS.²⁸ The petition asserts that the identified facilities can reasonably be retrofitted with control equipment or can operate existing controls more frequently to reduce NOx.

The petition provides and uses NY DEC generated air quality modeling data to quantify projected 2017 impacts on ozone concentrations from the collective NO_X emissions of the EGU and non-EGU (including oil and gas) facilities that emitted at least 400 tons-per-year of NO_X in each state that was linked in the EPA's modeling for the CSAPR Update ("400 tons-per-year sources"). According to the petition, results from NY DEC's independent modeling analysis show single-day impacts from individual states' groups of 400 tons-per-year sources of up to 6.34 ppb in Chautauqua County and 4.97 ppb in the New York portion of the NYMA nonattainment area.²⁹

The petition asserts that, where the maximum influence from an individual state's combined 400 tons-per-year sources exceeds 0.75 ppb at a particular monitor, this indicates significant contribution to nonattainment or interference with maintenance of the 2008 ozone

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 $^{^{28}}$ 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 (MARAMA). The petition also identifies non-EGU sources emitting greater than 400 tons of NO_X in the 2014 National Emissions Inventory (NEI).

²⁹ 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 (CMAQ) 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 one-percent-of-the-NAAQS threshold.

NAAQS, and an influence above 0.70 ppb indicates significant contribution to nonattainment or interference with maintenance of the 2015 ozone NAAQS.

The petition also challenges the applicability of the EPA's recently-released 2023 air quality modeling³⁰ to this CAA section 126(b) petition. The petition states that NY DEC has significant concerns about the assumptions and results of the EPA's modeling, such as the EPA's expectation that uncontrolled EGUs will greatly reduce their emissions rates in the absence of unit-level enforceable limits and the 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 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. The EPA notes that New York submitted its CAA section 126(b) petition before the EPA finalized the Determination Rule.

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³⁰ 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.

4. The petition requests that the EPA establish 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 in New York State.

The petition requests that the EPA establish permanent and enforceable NO_X emissions limits based on New York's determination of available cost-effective controls. 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.

5. Subsequent Actions and Correspondence Regarding the New York Petition

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 complete the necessary technical review, develop an adequate proposal, and allow time for notice and comment,

 $^{^{31}}$ According to the petition, New York's standard of \$5,000 per ton of NO_X reduced for RACT is inflation-adjusted. Hence, the EPA observes that this cost per ton will not change in future years even if inflation leads to increases in NO_X control costs per ton of NO_X reduced beyond current estimates. For example, assuming a control cost of \$5,000 per ton of NO_X reduced, a 10 percent inflation rate will yield a control cost of \$5,500 per ton (1.10 * 5,000), but the inflation-adjusted RACT basis of \$5,000 per ton of NO_X reduced remains unchanged.

including an opportunity for public hearing, on a proposed finding regarding whether emissions from the group 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 NAAQS in New York State. On May 11, 2018, the EPA published a final rule extending the deadline for acting on New York's section 126(b) petition to November 9, 2018.³²

Since receiving New York's section 126(b) petition on March 14, 2018, the EPA has received several letters from the public providing information regarding the content of the subject petition. We briefly describe those letters here.

On April 13, 2018, the U.S. Chamber of Commerce submitted a letter to the EPA requesting an extension beyond the 60-day statutory deadline for petition response and claiming legal and technical deficiencies in the New York petition. Specifically, the U.S. Chamber of Commerce asserts that the petition over-estimates emissions from "numerous" facilities identified in the petition and inappropriately includes monitoring sites that currently attain the ozone NAAQS. Further the U.S. Chamber of Commerce contends that applying New York's definition of RACT outside of New York raises "significant constitutional and statutory issues."

On June 20, 2018, Sunoco Partners Marketing & Terminals submitted a letter to the EPA providing corrections to the operating status of the Marcus Hook Refinery, identified in the New York section 126(b) petition as the Sunoco Inc. (R&M)/Marcus Hook Refinery, and requesting that the EPA remove the identified source from the list of facilities emitting more than 400 tons per year of NOx.

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³² 83 FR 21909 (May 11, 2018).

On April 25, 2018, the Air Stewardship Coalition (ASC) submitted a letter to the EPA requesting an extension beyond the 60-day statutory deadline for petition response citing the technical complexity of the New York petition. ASC submitted a follow-up letter on September 24, 2018, asking the EPA to deny New York's section 126(b) petition. The ASC letter asserts that New York State has no ozone attainment issues outside of the NYMA and that the NY DEC's independent modeling used a "non-standard approach" that resulted in "flawed" results.

On May 31, 2018, the Midwest Ozone Group (MOG) submitted a letter asking the EPA to deny New York's section 126(b) petition. The MOG letter asserts that the New York petition is deficient in that it incorrectly characterizes the emissions from identified sources and states; the petition does not consider exceptional events or international transport; and the petition does not consider the EPA's most recent modeling showing that all New York monitoring sites will attain the 2008 ozone NAAQS. Further, MOG provides the results of its own independent modeling of the May 1 through August 31, 2011, ozone season run at a 4-kilometer (km) grid resolution rather than the 12 km grid resolution used in the EPA's modeling. MOG asserts that at the finer resolution, all monitoring sites in New York attain both the 2008 and the 2015 ozone NAAQS. MOG provided the EPA with supplemental comments and analyses on October 19, 2018, and on December 17, 2018. MOG asserts that its additional comments further support the EPA's denial of the New York section 126(b) petition.

The EPA acknowledges receipt of these letters and has made them available in the docket for this action. However, the EPA is not responding directly to these letters in this notice nor is the EPA relying on the information provided in these letters as a basis for its proposed action. Rather, the EPA encourages interested parties to review this proposal and then submit relevant comments during the public comment period.

Page 31 of 68

IV. The EPA's Proposed Decision on the CAA Section 126(b) Petition from New York

A. The EPA's Approach for Granting or Denying CAA Section 126(b) Petitions Regarding the 2008 and 2015 8-hour Ozone NAAQS

As discussed in Section III.B of this notice, section 126(b) of the CAA provides a mechanism for states and other political subdivisions to seek abatement of pollution in other states that may be affecting their air quality. 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 methodology for making a CAA section 126(b) finding. *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).³³ 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 desired result. 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, critically, both provisions construe significant contribution to nonattainment and interference with maintenance

³³ 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.

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 these ambiguous terms (i.e., "contribute significantly to nonattainment" and "interfere with maintenance") 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 described further in Section III of this notice, ozone is a regional air pollutant and the EPA's previous analyses and regulatory actions have evaluated the regional interstate ozone transport problem using a fourstep analytic framework. The EPA most recently applied this four-step 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. Given the specific crossreference 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,

the EPA has not yet engaged in a rulemaking action to apply the good neighbor provision for the 2015 ozone NAAQS. However, the EPA recently released technical information intended to inform states' development of SIPs to address the 2015 ozone standard. 34 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 IV.B.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. 35 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 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 methodology 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

³⁴ 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).

³⁵ 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 proposed action and at https://www.epa.gov/airmarkets/memo-and-supplemental-information-regarding-interstate-transport-sips-2015-ozone-naaqs.

York's 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 sections 110(a)(2)(D)(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). 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 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).

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, 134 S. Ct. at 1604 n.18, 1608-09 (holding the EPA may not require sources in upwind states to reduce emissions by more

than necessary to eliminate significant contribution to nonattainment or interference with maintenance of the NAAQS in downwind states under the good neighbor provision).

Thus, it follows that if a state already has a SIP that the EPA approved as adequate to meet the requirements of CAA section 110(a)(2)(D)(i)(I) 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 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 it has determined 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), the EPA will evaluate the CAA

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

B. The EPA's Evaluation of Whether the Petition Is Sufficient to Support a CAA Section 126(b) 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 initial burden on the petitioner to establish a technical 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 from Delaware and Maryland regarding ozone emissions from four and 36 EGUs, respectively).

The EPA's interpretation of the statute is reasonable especially given the expeditious and limited timeframe Congress allotted to the EPA for action on a CAA section 126(b) petition: as described in Section III.D.5, Congress provided the EPA with 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 a requirement that the EPA undertake extensive fact-finding or independent analysis as part of its action on a petition and instead place 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, Maine, and New York regarding air quality impacts from numerous sources located in seven midwestern states); see also see also 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 502(b)(2) given the parallel 60-day deadline for the EPA to respond to a title V petition). In New York v. EPA, the D.C. Circuit evaluated the EPA's obligation in acting on a CAA section 126(b) petition, determining both 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 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. 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). It is difficult to imagine that Congress intended to require sources to shut down entirely absent a sufficient demonstration that 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 to this action, because Congress certainly could not have envisioned that hundreds of stationary sources would be required to shut down within 3 months without a complete and compelling justification. 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. 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, this too is a detailed analytic task that requires time and resources to develop.

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. As discussed in Section III, 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 this 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.³⁶ As further described in Sections IV.B.1-3, where the EPA has existing relevant information at its disposal that could help inform its proposed decision on New York's section 126(b) petition, the EPA is using such information as part of its discretionary independent analysis of the petition.

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

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

³⁶ See 83 FR 16064 (April 13, 2018); 83 FR 50444 (October 5, 2018). Page 39 of 68

states. The EPA conducted this evaluation for Chautauqua County and the NYMA regarding both the 2008 and 2015 ozone NAAQS.

As discussed in Section III.C, 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. In the EPA's prior regional transport rulemakings, the Agency generally evaluated whether upwind states "will" have such an impact based on projections of air quality in the future year that considers the timeframes for regionwide implementation of control strategies and the timeframe in which a rulemaking requiring such controls would be finalized. For the 1998 NO_X SIP Call, the EPA used an analytic year of 2007. For the 2005 CAIR, the EPA used analytic years of 2009 and 2010 for ozone and PM_{2.5}, respectively. 63 FR 57450; 70 FR 25241. 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 reasonable interpretation of an ambiguous term. North Carolina, 531 F.3d at 913–14. The EPA applied the same approach in finalizing CSAPR in 2011 and the CSAPR Update in 2016 by evaluating air quality in 2012 and 2017, respectively. 76 FR 48211; 81 FR 74537.

Particularly relevant to this action, the EPA also applied this interpretation of "will" in the 2018 Determination Rule to evaluate remaining good neighbor obligations with respect to the 2008 ozone NAAQS 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, 134 S. Ct. at 1600–01; *EME Homer City II*, 795 F.3d at 127, 129–30 (on remand from the Supreme Court, finding ozone-season NO_X 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 the EPA may require of sources in upwind states do not over- or under-control emissions with respect to downwind air quality at the time by which that those controls could feasibly be implemented.

Thus, in determining the appropriate future analytic year for purposes of assessing remaining interstate transport obligations for the 2008 ozone NAAQS in the Determination Rule, the EPA 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.

The EPA then evaluated the timeframe necessary to implement additional NO_X control strategies at various sources across the region. For EGUs, the EPA explained that it was appropriate to give particular weight to 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 may require up to 39 months for an individual power plant installing controls on more than one boiler, ³⁷ and that a minimum of 48 months (4 years) is a reasonable time-period to allow 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

³⁷ 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

regional factors as SCR installations.³⁸ The EPA, therefore, concluded that it may reasonably take up to 4 years to install the new emissions controls regionwide for EGUs. 83 FR 65893-901.

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 of non-EGU sources as well as the greater number and smaller size of the individual sources. 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. 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. 83 FR 65901-04.

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

³⁸ 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 is also in the EPA's CSAPR Update EGU NO_X Mitigation Strategies Final Rule TSD. See Docket ID No. EPA-HQ-OAR-2015-0500 (available at http://www.regulations.gov).

emissions control requirements could be feasibly promulgated and implemented by that earlier date. Accordingly, the EPA determined that 2023 was a reasonable year to assess downwind air quality to evaluate any remaining requirements under the good neighbor provision for the 2008 ozone NAAQS.³⁹ 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 in the January 6, 2017 NODA and an October 27, 2017, EPA memorandum. ⁴⁰ 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 Technical Support Document (TSD). ⁴¹ 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

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³⁹ 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.

⁴⁰ 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.

⁴¹ 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.

its own modeling guidance, ⁴² which recommends using model predictions from the "3 x 3" array of grid cells surrounding the location of the monitoring site. ⁴³ 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 percent water but contains an air quality monitor, that cell would remain in the calculation). ⁴⁴ For each individual monitoring site, the base period 2009-2013 average and maximum design values, 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 at *https://www.epa.gov/airmarkets/october-2017-memo-and-information-interstate-transport-sips-2008-ozone-naags*.

⁴² "Draft Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, PM2.5, 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.

⁴³ The EPA's modeling uses 12km² grid cells.

⁴⁴ 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.)

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. 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 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 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.

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) and because, as

Page 46 of 68

⁴⁵ See 81 FR 74530-74532 (October 26, 2016).

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 downwind air quality problem with respect to the 2008 ozone NAAQS in Chautauqua County and the NYMA. 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 Moderate ozone nonattainment areas. ⁴⁶ While the EPA is not reopening the analysis and findings made in the Determination Rule with respect to the 2008 ozone NAAQS in this action, the EPA is evaluating the petition, consistent with the standard of review described in Section IV.A, 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 EPA notes that the petition asserts that the EPA cannot use its 2023 modeling to support a review of the petition in part because the 2023 analytic year does not fit the timeframe under CAA section 126(c), which requires that compliance with any CAA section 126(b) finding must be met "in no case later than three years after the date" of such finding. However, the EPA's evaluation of air quality in 2023 is a necessary step to determine whether the sources named in New York's petition are in violation of the good neighbor provision in the first instance, and, thus, subject to the provisions of CAA section 126(c). Moreover, the choice of

⁴⁶ 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.

2023 as an analytic year does not preclude the implementation of a remedy in an earlier year if the necessary finding is made under CAA section 126(b). If the EPA were to determine based on its analysis of the 2023 projections that the named sources emit or would emit in violation of the good neighbor provision, the EPA could still implement a remedy that complies with the earlier timeline set out under CAA section 126(c). Therefore, the EPA's reasonable choice of 2023 as an analytic year for evaluating New York's petition does not, in and of itself, preclude implementation of a remedy at an earlier date.

The New York petition further 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 greatly 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 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). 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. The petition does not provide any new information not already considered by the EPA in the Determination Rule as to these issues and therefore, has no basis to reconsider its conclusions finalized in that action.

The next two sections discuss the EPA's evaluation of the petition's step 1 analysis regarding Chautauqua County and the NYMA with respect to both the 2008 and 2015 ozone NAAQS. The EPA first evaluates the sufficiency of the analysis provided in the petition for each area and then considers how the 2023 modeling or other pertinent information should inform the EPA's conclusion regarding whether there will be downwind nonattainment or maintenance concerns in each area with respect to each NAAQS.

Chautauqua County

First, for Chautauqua County, New York's petition does not provide sufficient information to demonstrate that there will be a downwind nonattainment or maintenance problem 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 petition did not demonstrate that there will be a future nonattainment or maintenance problem in that area for that 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. As discussed earlier, the EPA evaluates downwind ozone air quality problems for purposes of step 1 of the four-step interstate transport framework using

⁴⁷ The EPA has consistently taken the position that CAA section 110(a)(2)(D) 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 (Aug. 8, 2011); Final Response to Petition from New Jersey Regarding SO₂ Emissions From the Portland Generating Station, 76 FR 69052 (Nov. 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).

observed and modeled future air quality concentrations for a year that considers the relevant attainment deadlines for the NAAQS and the anticipated compliance timeframe for potential control strategies. AR New York's section 126(b) petition does not include analyses indicating that Chautauqua County may be violating or have difficulty maintaining the 2008 or 2015 ozone NAAQS either currently or in a relevant future year. In fact, the petition acknowledges that this area attained the NAAQS by the relevant attainment date. The petition also did not present air quality projections indicating that Chautauqua County will not be in attainment or will struggle to maintain the NAAQS in a relevant future year. The petition alleges that the area remains in danger of exceeding the ozone NAAQS but does not 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.

Additionally, the EPA has air quality data that 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, the 2015-2017 design value in Chautauqua County is 68 ppb, which is below the level of both the 2008 and 2015 ozone NAAQS. Furthermore, the EPA recently finalized a determination that the Jamestown, New York Marginal nonattainment area (Chautauqua County) has attained the 2008

⁴⁸ 81 FR 74517.

⁴⁹ 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/2018-07/ozone designvalues 20152017 final 07 24 18.xlsx.

ozone NAAQS.⁵⁰ Additionally, the EPA's recent air quality modeling described earlier in this section indicates that the monitor in Chautauqua County is expected to continue to both attain and maintain the standard in 2023, with an average 2023 design value of 58.5 ppb and a maximum 2023 design value of 60.7 ppb.⁵¹ Consequently, due to the facts that the petition has not identified an air quality problem in Chautauqua County for the 2008 or 2015 ozone NAAQS, that the EPA's independent analysis affirms that Chautauqua County is attaining both the 2008 and 2015 ozone NAAQS, and that all available evidence indicates that the monitoring sites will continue to attain and maintain the NAAQS in the future, the EPA is proposing to deny New York's petition regarding Chautauqua County for both the 2008 and the 2015 ozone NAAQS.

Second, with respect to the NYMA, the 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. As described in Section III.D 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 indicating that some monitoring sites in the NYMA are above the 2008 NAAQS. However, the EPA does not agree that an area's current attainment status alone is sufficient 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

⁵⁰ 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). ⁵¹ 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.

previously discussed, 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.

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 III.C.2 of this notice, the EPA already determined that the CSAPR Update fully addresses the good neighbor provision requirements for the 2008 ozone NAAQS for all eastern 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 proposing 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.

Regarding the 2015 ozone NAAQS, the EPA's projections indicate that the average design value for five of the six monitoring sites in the NYMA and the maximum design values at

all six monitoring sites in the NYMA will be above the 2015 ozone NAAQS in 2023.⁵² 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.

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 to determine whether there is sufficient information to conclude that the state identified that the upwind states where the sources named in the petition are located are linked to a downwind air quality problem. Because, as described earlier, 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, the EPA has no basis to find a linkage at step 2 of the four-step framework between the named upwind states and these downwind areas with regard to the respective NAAQS.

With respect to the NYMA for the 2015 ozone NAAQS, existing information available to the EPA 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.

This document is a prepublication version, signed by EPA Administrator, Andrew R. Wheeler on 5/6/2019. We have taken steps to ensure the accuracy of this version, but it is not the official version.

⁵² 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. However, 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. *See* 83 FR 50460.

Page 53 of 68

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 receptor by less than the screening threshold do not contribute to the downwind air quality problem at step 2. The EPA has therefore previously determined, without conducting any additional analysis, that such states do not significantly contribute to nonattainment or interfere with maintenance of the NAAQS under the good neighbor provision. Upwind states that impact a downwind receptor at or above the threshold are identified as contributing to a downwind air quality problem (*i.e.*, they are said to be "linked" to that downwind receptor). The EPA then proceeds to the multi-factor step 3 analysis to determine if the linked upwind state significantly contributes to nonattainment or interferes with maintenance of the NAAQS at the downwind receptor(s). ⁵³

In previous federal actions,⁵⁴ the EPA's analysis of the sum of contributions from all linked upwind states (*i.e.*, collective contribution) concluded that a screening threshold 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 our analysis of collective

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⁵³ 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.

⁵⁴ 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).

contribution for the 2015 ozone NAAQS⁵⁵ using data drawn from the results of the EPA's updated 2023 modeling.⁵⁶ This analysis, which followed the thresholds analyses conducted in both the CSAPR and CSAPR Update rulemakings,^{57,58} 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.

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

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⁵⁵ 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).

⁵⁶ 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-supplemental-information-regarding-interstate-transport-sips-2015.

⁵⁷ 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.

⁵⁸ 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.

2015 ozone NAAQS. If the EPA instead applies the alternative 1 ppb threshold, the EPA's analysis indicates that the sources in 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.⁵⁹ The EPA is not in this action determining which of the potential thresholds described in this section (*i.e.*, 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. However, 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 will evaluate, in the following section, whether the petition has adequately demonstrated at step 3 of the four-step interstate transport framework that the sources in the upwind states will significantly contribute to nonattainment or interfere with maintenance of the NAAQS.

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

As described in Section III.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

⁵⁹ As identified previously in this notice, the EPA's recent modeling included essentially all the EGUs at the facilities named in the New York petition. We say "essentially" because the New York petition identifies sources at the facility, rather than at the unit, level while the EPA looks at unit-level data and includes all fossil-fuel-fired boiler or combustion turbine EGUs with a capacity (electrical output) greater than 25 MW. *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).

maintenance of the NAAQS (i.e., step 3 of the four-step interstate transport framework). 60 For the reasons discussed in the following paragraphs, the EPA is proposing to find 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 proposing to deny 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. We also note that the petition addresses hundreds of sources across nine states. The EPA is taking comment on whether to also deny the petition because the petitioner has not provided justification for the proposition that 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). For example, "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. Although the EPA already has identified a sufficient basis to propose denial of the petition as to Chautauqua County (for the 2008 and 2015 ozone NAAQS) and NYMA (for the 2008 ozone

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⁶⁰ 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*, 134 S. Ct. at 1596-97 (noting upwind states are only obliged to eliminate emissions meeting both the step 2 and 3 inquiries).

NAAQS) at step 1 of the four-step framework, the EPA is also relying on our analysis of step 3 as an additional and independent basis for denial as to the petition's claims for these areas.

As discussed in Section III.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 76 FR 48248-49 and 48254-55; 81 FR 74519; 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 amount of emissions (if any) from each upwind state that contribute to nonattainment or

interfere with maintenance in a downwind area and, thus, should be subject to control. ⁶¹ In these prior rules, the EPA has selected the level of control stringency deemed cost-effective 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 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. ⁶² 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 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*, 134 S. Ct. at 1607.

As discussed in Section IV.A, the EPA interprets the substantive standard under CAA section 126(b) consistent with its interpretation of the good neighbor provision in CAA section

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⁶¹ For example, in the CSAPR Update (81 FR 74505), 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. 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 (August 8, 2011).

110(a)(2)(D)(i). Accordingly, the EPA believes it could be reasonable to consider the same factors whether evaluating ozone transport in the context of a good neighbor SIP under CAA section 110 or a section 126(b) petition. Thus, the EPA has reviewed New York's petition to determine whether it has provided sufficient information to support a determination based on the same type of cost and air quality factors 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 CSAPR Update and 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 data and factors that the EPA has generally relied on in step 3, has not conducted any sort of multifactor analysis to determine whether cost-effective controls are available at the named sources, 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 the conclusions 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. Here, the petition simply names facilities that appear to have larger emissions than other facilities (at least 400 tons of NO_X per year) without supporting why the named facilities

should make certain reductions. 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; ⁶³ (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 such 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 relevant cost and air quality factors should be weighed to determine an appropriate level of control for the named sources. Instead, the petition simply suggests that upwind sources should be subject to a comparable level of control as sources 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 such as costs of controls in the

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⁶³ Such information may be found in the EPA's Enforcement and Compliance Data (ECHO), which is a publicly available database containing information for nearly all point sources in the U. S. Data are typically updated several times a month. The operating status of the point source at the facility level is available. Thus, the operating status of non-EGU point sources can be determined outside of having an up to date NEI version available. This is likely to be accurate for the operating status of EGUs as well.

downwind area may provide useful data for consideration when evaluating upwind emissions reduction potential, such information is not determinative of the appropriate level of upwind control. 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 designated nonattainment areas, 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 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, 134 S. Ct. 1584. 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 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 in light of 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 provides 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 the EPA issued 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 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). Together, the EPA found that these

actions fully address the good neighbor requirements with respect to the 2008 ozone NAAQS for 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 limits at any of the sources named in the petition to ensure reductions are being achieved under the CSAPR Update.

As discussed earlier, the EPA interprets CAA section 126(b) as placing the burden on the petitioner to demonstrate in the first instance that a finding under the provision is justified. The breadth of New York's petition demonstrates why the EPA's interpretation is particularly reasonable. The petition names over 350 sources from several different source sectors (both EGUs and non-EGUs) 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 conducted for separate rulemaking actions and not solely for use in evaluating this petition. The EPA has not already conducted the type of multifactor analysis that would normally be used in step 3 to determine whether such a large group of upwind sources emits or would emit in violation of the good neighbor provision. The EPA also does not currently have information available to independently conduct such an analysis, especially for such a variety of sources. As noted in the Determination Rule (81 FR 65878), the EPA 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. As the EPA noted in Section IV.B, 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 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 in the first instance to demonstrate that the statutory threshold has been met. For the reasons discussed in this section, the petition does not provide the EPA with a sufficient basis to conclude at step 3 that sources in the named states will significantly contribute to nonattainment or interfere with maintenance in New York with respect to either the 2008 or 2015 ozone NAAQS. Therefore, on this basis, the EPA is proposing to deny New York's petition as to all named sources because, in addition to the specific failures described above for steps 1 and 2, the state has also failed to meet its burden to demonstrate at step 3 that the sources emit or would emit in violation of the good neighbor provision.

V. Conclusion

Based on the information discussed in this notice, the EPA is proposing to deny New York's CAA section 126(b) petition. The EPA has described several technical deficiencies with the petition and, therefore, proposes to deny on the basis that New York has not met its burden to demonstrate that the named sources emit or would emit in violation of the good neighbor provision with respect to the 2008 ozone NAAQS or the 2015 ozone NAAQS. For Chautauqua County, the petition does not provide sufficient information to indicate that there will be a downwind air quality problem (either nonattainment or maintenance) with respect to either the 2008 or the 2015 ozone NAAQS. For the NYMA, with respect to the 2008 ozone NAAQS, 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 an air quality problem with respect to either NAAQS in Chautauqua County, and that there is not projected to be any further air quality problem with respect to the 2008 ozone NAAQS in the NYMA. As an additional independent basis for the proposed denial, even if the EPA assumed that the named upwind states were linked to downwind air quality problems in New York at steps 1 and 2 of its interstate transport framework, material elements in the petition's step 3 analysis are insufficient, such that the EPA cannot conclude that any named source or group of sources in any of the named states will significantly contribute to nonattainment or interfere with maintenance in any area in New York with respect to either NAAQS. The EPA requests comment on its proposed denial of New York's CAA section 126(b) petitions, including the bases for the decision described herein.

VI. Judicial Review

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 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 proposes to find that this action is based on a determination of "nationwide scope or effect" within the meaning of CAA section 307(b)(1). This action addresses emissions impacts from

Page 66 of 68

sources located in nine states, which are located in multiple EPA Regions and federal circuits.

The proposed 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 proposes to determine that any final action related to this proposal is based on a determination of nationwide scope or effect for purposes of section 307(b)(1) of the CAA. Thus, pursuant to CAA section 307(b), any petitions for review of any final action related to this proposal 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**.

Page 68 of 68 - Response to Clean Air Act Section 126(b) Petition from New York

VII.	Statutory Authority	
	42 U.S.C. 7410, 7426, 7601.	
Dated	:	
	w R. Wheeler, nistrator.	