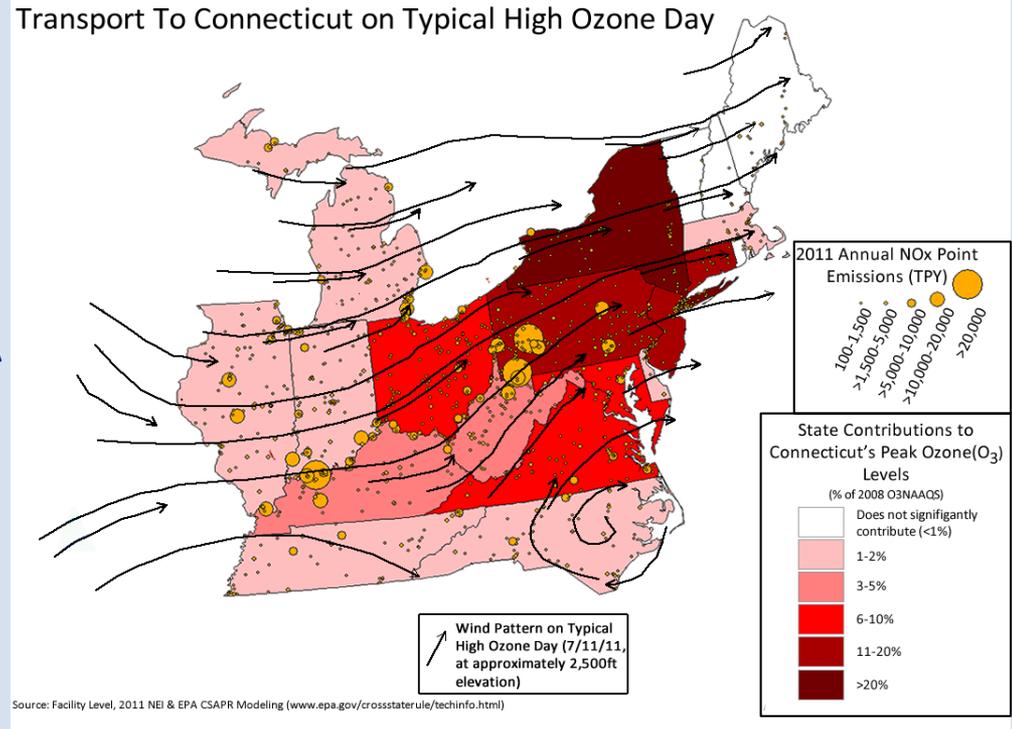




Connecticut Department of Energy and Environmental Protection



Connecticut Initiatives on Interstate Air Pollution and other EPA Actions



Ric Pirolli, Director of Planning and Standards
SIPRAC
November 9, 2017



Connecticut Department of Energy and Environmental Protection

Agenda

- Quick Recap of why Connecticut cares about Interstate Transport
- Actions CTDEEP has taken to address interstate transport
- Status of those actions
- Discuss recent EPA actions

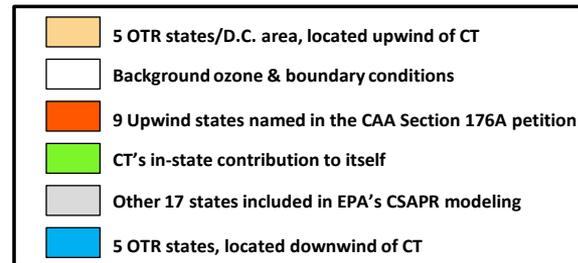
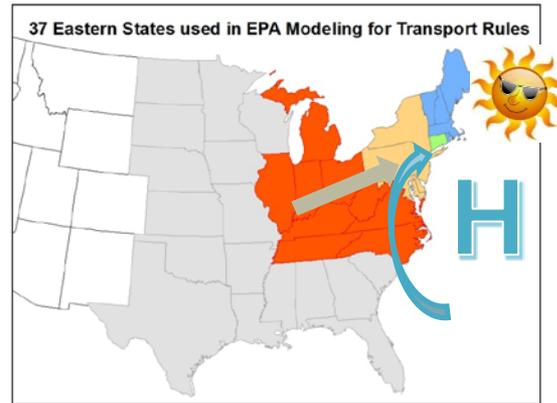
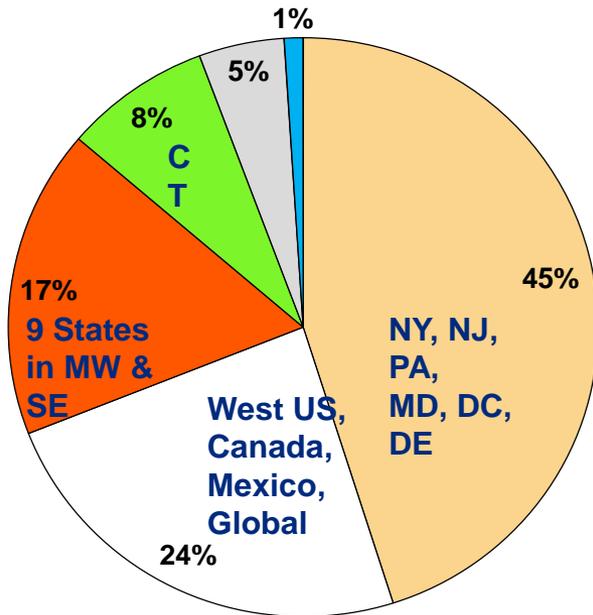


Why do we care about Interstate Pollution Transport?



Connecticut's Air Pollution Problem: Ozone - Dominated by Overwhelming Transport

Percent Contributions to Connecticut Peak Ozone Levels



- CT monitors measuring the highest ozone levels on East Coast
- On worst days, >90% of CT's ozone can be due to upwind emissions
- Nonattainment means increased compliance burden
- Clean Air Act & EPA rules haven't addressed the problem

Data source: http://www.epa.gov/crossstaterule/pdfs/CSAPR_Ozone%20and%20PM2.5_Contributions.xls
Percentages calculated using EPA modeled 2012 design values & state contributions to CT, averaged across all CT monitors.



Governor's Position on Interstate Ozone Transport

Told EPA and upwind states

“Connecticut is tired of serving as the tailpipe of America”.

“We’re paying a steep public health and economic price for the failure of upwind states to make investments needed to operate power plants and in a clean and efficient manner. Now is the ideal time – with cheap natural gas available – to get the upwind polluters to take action.”

“Either upwind states need to be ‘good neighbors’ and further reduce air pollution that impacts Connecticut– or the EPA must take additional action to require them to do so.”



Connecticut Department of Energy and Environmental Protection

CTDEEP using all tools in the CAA toolbox to address transport

- CAA sec. 107(d)(1)(A)(i) ask for “Big Nonattainment Area” for the 2008 and 2015 NAAQS
- CAA sec. 176A petition to include additional states in OTR
- CAA sec. 126 petition to control emissions from PA power plant
- Possible CAA sec. 184(c) petition with OTC on NYC turbines
- Engaging EPA administratively on I-SIPs
 - CAA sec. 110(a)(2)(D) “good neighbor” SIPs



CAA Section 107(d)(1) - Designations

(1) Designations generally

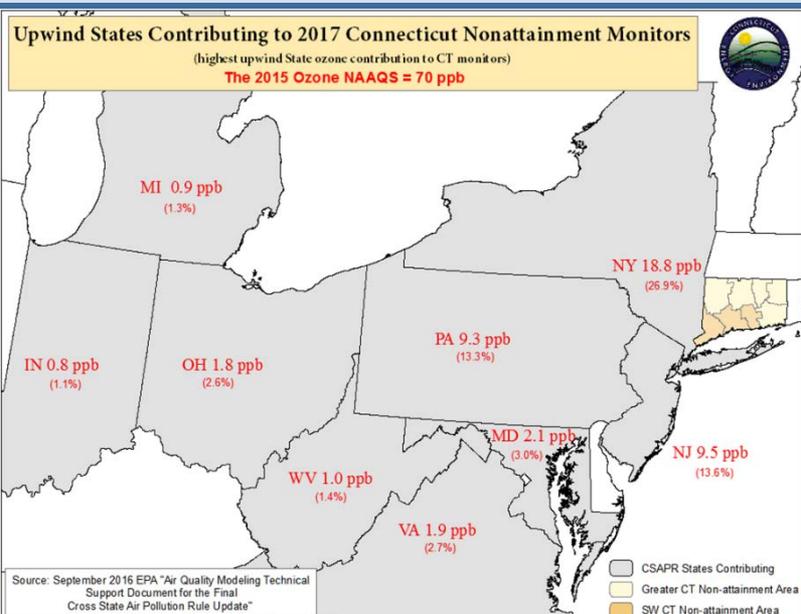
(A) Submission by governors of initial designations following promulgation of new or revised standards. By such date as the Administrator may reasonably require, but not later than 1 year after promulgation of a new or revised national ambient air quality standard for any pollutant under section 109, **the Governor** of each State shall (and at any other time the Governor of a State deems appropriate the Governor may) **submit** to the Administrator a list of all areas (or portions thereof) in the State, designating as

(i) nonattainment, any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant,

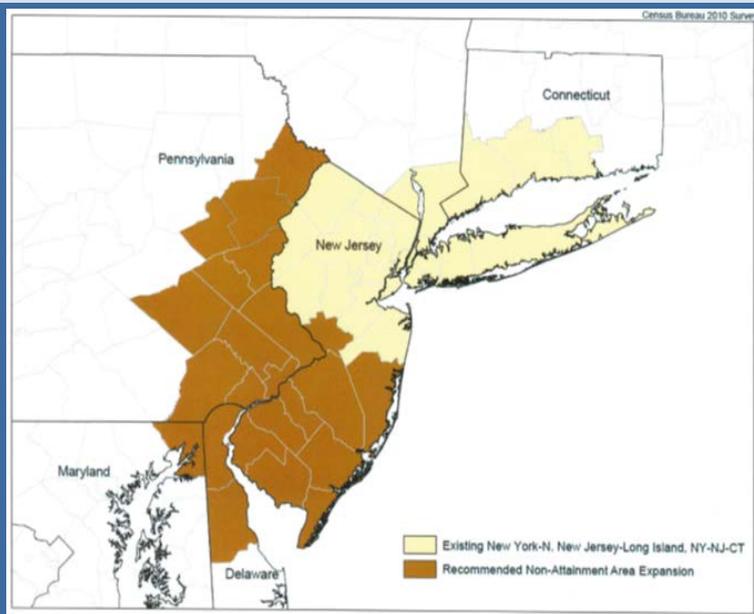
(B) Promulgation by EPA of designations. (i) Upon promulgation or revision of a national ambient air quality standard, the Administrator shall promulgate the designations of all areas (or portions thereof) submitted under subparagraph (A) as expeditiously as practicable, but in no case later than 2 years from the date of promulgation of the new or revised national ambient air quality standard. Such period may be extended for up to one year in the event the Administrator has insufficient information to promulgate the designations.



Big Nonattainment Area Asks



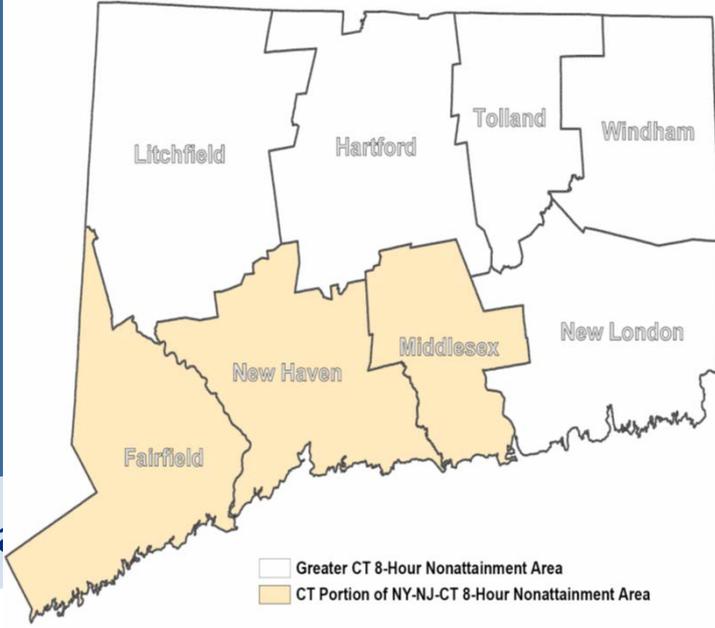
Tie upwind states to CT's ozone problem to force action



Super Regional

Inner Corridor

Connecticut



Connecticut Department of Environmental Protection

Environmental Protection



CAA 176A – Interstate Transport Commissions

a) Authority to establish interstate transport regions

Whenever, on the Administrator's own motion or by petition from the Governor of any State, the Administrator has reason to believe that the interstate transport of air pollutants from one or more States contributes significantly to a violation of a national ambient air quality standard in one or more other States, the Administrator may establish, by rule, a transport region for such pollutant that includes such States. ***The Administrator, on the Administrator's own motion or upon petition from the Governor of any State, or upon the recommendation of a transport commission established under subsection (b) of this section, may—***

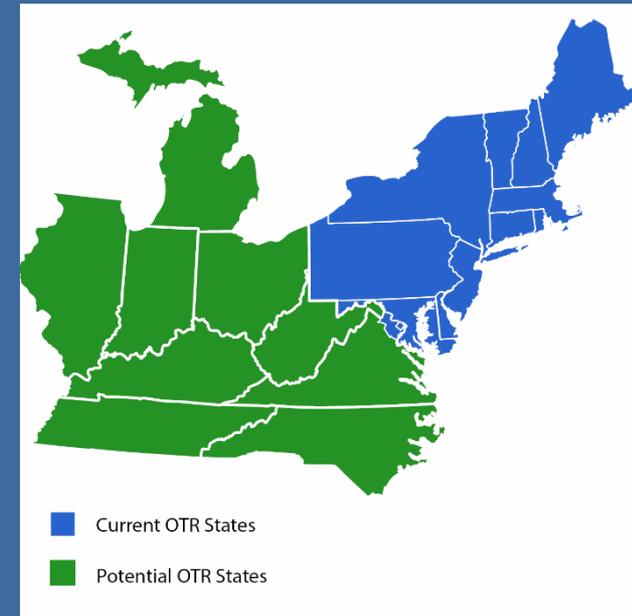
(1) add any State or portion of a State to any region established under this subsection whenever the Administrator has reason to believe that the interstate transport of air pollutants from such State significantly contributes to a violation of the standard in the transport region ...

The Administrator shall approve or disapprove any such petition or recommendation within 18 months of its receipt...



DEEP led CAA 176A Petition to Expand OTR

- EPA's lack of action demanded state action
- On December 9th, 2013, 9 OTR states (all but ME, NJ & DC) petitioned EPA to expand the OTR to include 9 upwind states
 - IL, IN, KY, MI, NC, OH, TN, VA, WV
- EPA missed deadline to act
- CT AGO filed Notice of Intent to Sue
- Consent Decree signed
- EPA denied petition on 11/3/17
- Petitioning states and their AGOs evaluating next steps



EPA's Reason for Denial of the 176A Petition

- 176A petition is not the right tool
 - CAA 126 petitions more efficient
 - Good Neighbor SIPs more efficient
- Subjecting the petitioned states to the minimum VOC control requirements of the OTR (i.e. I/M program) will not affect attainment in downwind states



CAA 126 – Interstate Pollution Abatement

(b) Petition for finding that major sources emit or would emit prohibited air pollutants

Any State or political subdivision may petition the Administrator ***for a finding that any major source or group of stationary sources emits or would emit any air pollutant in violation*** of the prohibition of section 7410(a)(2)(D)(ii) of this title or this section. ***Within 60 days after receipt of any petition under this subsection and after public hearing, the Administrator shall make such a finding or deny the petition.***



CAA 126 Petition Against Brunner Island Power Station

- Filed petition on June 6, 2016
- EPA decision due within 60 days
- On 7/25/16 EPA delays decision to January 25, 2017
 - EPA missed the January deadline
- On 3/9/17 AGO filed NOI and subsequent deadline suit (5/16/17)
 - Negotiating deadlines for final action on petition
 - Negotiations fell through 11/7 and briefs due next week
- EPA in their 176A petition denial says GN SIP process is more efficient!



CAA Section 184– Control of interstate ozone air pollution

(c) ADDITIONAL CONTROL MEASURES.—

(1) RECOMMENDATIONS.—Upon petition of any State within a transport region established for ozone, and based on a majority vote of the Governors on the Commission 1 (or their designees), the Commission 1 may, after notice and opportunity for public comment, develop recommendations for additional control measures to be applied within all or a part of such transport region if the commission determines such measures are necessary to bring any area in such region into attainment by the dates provided by this subpart. The commission shall transmit such recommendations to the Administrator.

(2) NOTICE AND REVIEW.—Whenever the Administrator receives recommendations prepared by a commission pursuant to paragraph (1) (the date of receipt of which shall hereinafter in this section be referred to as the “receipt date”), the Administrator shall— (A) immediately publish in the Federal Register a notice stating that the recommendations are available and provide an opportunity for public hearing within 90 days beginning on the receipt date; and (B) commence a review of the recommendations to determine whether the control measures in the recommendations are necessary to bring any area in such region into attainment by the dates provided by this subpart and are otherwise consistent with this Act.

(3) CONSULTATION.—In undertaking the review required under paragraph (2)(B), the Administrator shall consult with members of the commission of the affected States and shall take into account the data, views, and comments received pursuant to paragraph (2)(A).

(4) APPROVAL AND DISAPPROVAL.—Within 9 months after the receipt date, the Administrator shall (A) determine whether to approve, disapprove, or partially disapprove and partially approve the recommendations; (B) notify the commission in writing of such approval, disapproval, or partial disapproval; and (C) publish such determination in the Federal Register. If the Administrator disapproves or partially disapproves the recommendations, the Administrator shall specify— (i) why any disapproved additional control measures are not necessary to bring any area in such region into attainment by the dates provided by this subpart or are otherwise not consistent with the 1 Act; and (ii) recommendations concerning equal or more effective actions that could be taken by the commission to conform the disapproved portion of the recommendations to the requirements of this section.

(5) FINDING.—Upon approval or partial approval of recommendations submitted by a commission, the Administrator shall issue to each State which is included in the transport region and to which a requirement of the approved plan applies, a finding under section 110(k)(5) that the implementation plan for such State is inadequate to meet the requirements of section 110(a)(2)(D). Such finding shall require each such State to revise its implementation plan to include the approved additional control measures within one year after the finding is issued.



CAA Section 184(c) – Summary

- Upon petition of any State within the OTR, and with a majority vote of the Governors/Designees on the Commission
- Develop recommendations for additional control measures to be applied in all/part of the OTR if needed to bring region into attainment and transmit to EPA Administrator
- Notice and hearing requirements by OTC and EPA
- Immediately initiate review and approval/disapproval within 9 months
- Disapproval requires EPA to recommend equal or more effective actions
- Administrator then issues finding that all approved measures be included in the applicable SIPs within 1 year



NY Turbines and CAA 184(c) Petition



www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

November 16, 2016

David Foerter, Executive Director
Ozone Transport Commission
444 N. Capitol Street, NW
Suite 322
Washington, DC 20001

RE: Petition to the Ozone Transport Commission for Additional Control Measures Pursuant to Section 184(c) of the Clean Air Act – New York High Electric Demand Day Units in Downstate New York

Dear Mr. Foerter:

The Clean Air Act (CAA) established the Ozone Transport Commission (OTC) to advise the United States Environmental Protection Agency (EPA) on interstate air pollution transport issues and to develop and implement regional solutions to protect public health by cooperatively addressing the ground-level ozone problem in the Northeast and Mid-Atlantic regions. Due to significant transport, Connecticut fails to meet the 1997 and 2008 ozone national ambient air quality standards (NAAQS) and will be classified as nonattainment under the 2015 ozone NAAQS.

More than one hundred and seventy-five peaking turbines are located in the New York metropolitan area and significantly contribute to Connecticut's ozone problem, especially on days when electric demand is high. Of these 175 turbines, more than 150 were installed prior to 1987. These pre-1987 turbines are not well controlled and should be subject to additional pollution control measures. The pre-1987 turbine NOx emissions can exceed 100 tons on high ozone days and can contribute to the formation of almost 5 ppb of ozone, which can then be transported to Connecticut. The control of these turbines is a necessary step toward bringing Connecticut into attainment with the 2008 ozone NAAQS. Therefore, pursuant to Section 184(c) of the CAA, Connecticut hereby petitions the OTC to develop and transmit to the Administrator recommendations for additional control measures on combustion turbines located in downstate New York.

- Petition on hold as NY works on turbine rule.
- If NY rule is not enacted- file petition with OTC.
- If unable to get OTC majority vote - file 126 petition with EPA.



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December 19, 2016

Mr. Basil Seggos, Commissioner
New York Department of Environmental Conservation
625 Broadway
Albany, NY 12233-1011

RE: Combustion Turbines in Downstate New York

Dear Commissioner Seggos:

For nearly forty-five years, our states have worked together and made great progress toward achieving clean air for our citizens. As much as I appreciate the collaboration and leadership your agency has provided and continues to provide, we all need to do more to reduce our emissions. Recent work demonstrates that the pathway to achieving the health based ozone national air quality standard in the southwest portion of Connecticut is not achievable without additional control requirements on combustion turbines in the greater New York City area.

Our failure to attain the national ambient air quality standards for ozone results in the unfair and unacceptable health impacts of high ozone on millions of people. Therefore, it is critical for New York to take prompt regulatory action to address the emissions from combustion turbines that operate on high ozone days.

I appreciate the fact that Assistant Commissioner Jared Snyder has committed that the New York Department of Environmental Conservation (NYDEC) will work with stakeholders and plans to publish notice of a proposed rule to adequately control combustion turbines in New York by March of 2017. Based on this commitment, Connecticut agreed to withhold pursuing a petition to the Ozone Transport Commission under Section 184(c) of the Clean Air Act.

We will continue our critical collaboration on the New York-New Jersey-Connecticut's attainment plan and are counting on New York's timely action to address combustion turbine emissions. However, despite the encouraging news that New York is moving rapidly towards promulgation of a rule of significant importance to Connecticut, if NYDEC is not successful in timely regulatory action with this critical rulemaking, Connecticut will have little choice but to pursue action as provided for in the Clean Air Act.

We look forward to continued cooperation and collaboration as work together to address the clean air challenge we share.

Sincerely,

Robert J. Klee
Commissioner

cc: Jared Snyder, Assistant Commissioner, NYDEC
Michael Sullivan, Deputy Commissioner, CT DEEP
David Foerter, Executive Director, OTC

184(c) Process

- State petitions OTC
- OTC votes (majority needed)
- OTC petitions EPA.

Petition to the United States Environmental Protection Agency Pursuant to Section 126 of the Clean Air Act for Abatement of Emissions from the New York Combustion Turbines, as Such Generating Units Significantly Contribute to Nonattainment of, and Interfere with Maintenance of, the 2008 Ozone National Ambient Air Quality Standard in the State of Connecticut

I. Introduction, Summary of Conclusion and Requested Remedy¹

The State of Connecticut, through the Department of Energy & Environmental Protection ("DEEP"), hereby petitions the United States Environmental Protection Agency ("EPA") pursuant to section 126(b) of the Clean Air Act, 42 U.S.C. § 7426(b), to abate the emissions from New York combustion turbines. Emissions from New York combustion turbines are no more than 4-100 miles from the Connecticut ozone monitors. They significantly contribute to ozone levels that exceed the 2008 8-hour ozone National Ambient Air Quality Standard ("NAAQS") at two out of twelve ozone monitors in Connecticut and therefore interfere with both attainment and maintenance of this NAAQS. In addition, by EPA's own projections, four Connecticut ozone monitors will continue to be nonattainment or maintenance sites in 2017 even after full implementation of the proposed Cross-State Air Pollution Rule Update (CSAPR Update).² Modeling made available to Connecticut shows, based on 2011 emissions of nitrogen oxides (NOx) that are consistent with current allowable emission levels, New York combustion turbine emissions alone are sufficient to significantly contribute (ozone concentration greater than 0.75, or 1 percent of the NAAQS) to ozone levels in Connecticut that exceed the 2008 ozone NAAQS.

This petition clearly demonstrates in a manner consistent with EPA's own regulatory



CAA Section 110(a) – State Implementation Plans

(1) Each State shall, after reasonable notice and public hearings, adopt and submit (to the Administrator, **within 3 years** (or such shorter period as the Administrator may prescribe) after the promulgation of a national primary ambient air quality standard...a plan which provides for implementation, maintenance, and enforcement of such primary standard in each air quality control region (or portion thereof) within such State.

(2) Each implementation plan submitted by a State under this chapter shall be adopted by the State after reasonable notice and public hearing. Each such plan shall—

(D) contain adequate provisions—

(i) prohibiting, consistent with the provisions of this subchapter, any source or other type of emissions activity within the State from emitting any air pollutant in amounts which will—

(I) contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any such national primary or secondary ambient air quality standard, or

(II) interfere with measures required to be included in the applicable implementation plan for any other State under part C of this subchapter to prevent significant deterioration of air quality or to protect visibility,



Section 110(a)(2)(D)(i)(I) – Good Neighbor Provision

- SIPs were due March 2011 for the 2008 Ozone NAAQS
- As of today, the majority of states still don't have approved SIPs
- CT's attainment dates were 2014 (marginal) & 2017 (moderate) and probably bumped up to Serious (2020)
- CT's 2017 Attainment Plan shows SWCT can not attain unless upwind states fulfill their good neighbor obligations
- EPA used 2023 to determine state's good neighbor obligation in latest modeling
- EPA in their 176A petition denial says GN SIP process is more efficient!
- CTDEEP will be very active in challenging SIPs as they are noticed.



Example of a bad neighbor



EPA's Recent Transport Modeling

Accompanying Memo:

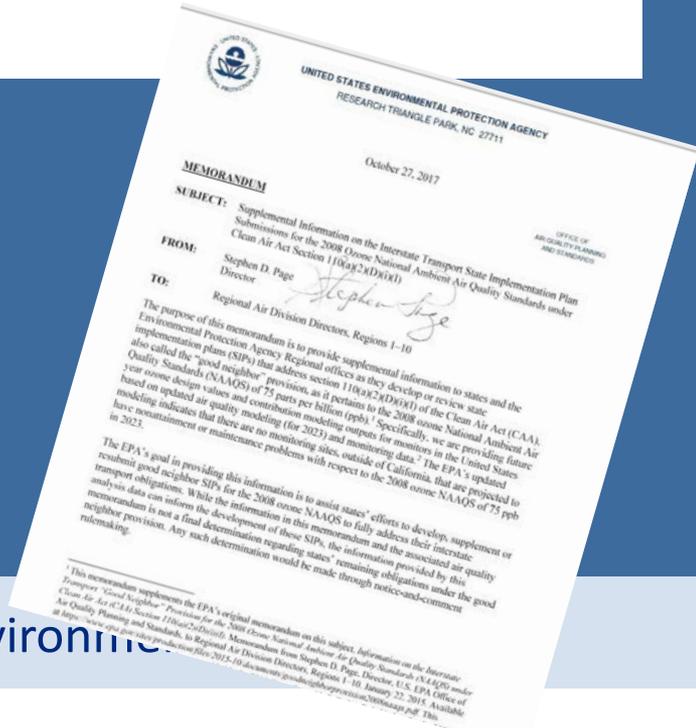
- Cites feasibility and practical limits to adding additional controls to EGUs by required 2008 serious area standard deadline (2020), therefore the EPA chose to use 2023.
- Justification seems similar to the rational used in the already rejected CAIR approach.
- Provided for the purpose of support the Good Neighbor SIPs for the 2008 Ozone Standard.
- Only California will have non-attainment problems in 2023.

What this means to Connecticut:

- Upwind Obligations are “relieved”
- Failure to attain consequences or the need for additional strategies fall to Connecticut

Status: Evaluating our options

Connecticut Department of Energy and Environment



2015 8-hr Ozone NAAQS Update

- Strengthened standard from 75 ppb to 70 ppb, effective October 1, 2015
- Gov's Designation Recommendation made by October 1, 2016
- EPA's final designations required by October 1, 2017
- Attainment deadline: 2020 or 2023
- June 6, 2017 EPA Administrator Pruitt issues letter announcing a 1-year delay in designations
- August 10, 2017 EPA withdraws extension for promulgating designations
- September 6, 2017 over 300 businesses groups request EPA to reconsider standard
- October 5, 2017 – states file Notice of Intent to Sue EPA for failure to issue designations. (NY, CA, CT, IL, IA, ME, MA, MN, OR, PA, RI, VT, WA, DC)
- November 7, 2017 EPA designates attainment areas only
- November 8, 2017 states file a motion to govern



In Summary

- EPA's missed CAA deadlines results in continued negative impacts to the environment, public health, and businesses in CT as we struggle to attain the ozone NAAQS on our own
- Upwind states do not have attainment issues and getting emissions reductions from them takes a lot of resources and political will without an EPA driver.
- EPA's latest transport modeling is unrealistic and predicts CT attaining the 2008 NAAQS in 2023 which makes CTDEEP's job of getting upwind states to reduce emissions a whole lot harder
- EPA 's solution on interstate transport has the unintended consequence of putting states in adversarial positions instead of showing leadership, stepping in and solving it.



Just one more thing

- Although interstate transport is the largest issue and key in achieving clean air in Connecticut, we still have an obligation to continue to obtain local emissions reductions when we find its reasonable.
- Section 172(c)(1) of the CAA requires nonattainment areas to *Provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall provide for attainment of the national primary ambient air quality standards*

