

December 14, 2020

Mr. Andrew Wheeler, Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Via Electronic Submission
To the Federal eRulemaking Portal
www.regulations.gov

Attention: Docket ID No. EPA-HQ-OAR-2020-0272

RE: Proposed Rule- Revised Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS

Dear Administrator Wheeler:

The Connecticut Department of Energy and Environmental Protection (DEEP) welcomes the opportunity to submit these written comments on the United States Environmental Protection Agency's (EPA's) proposed rule, "Revised Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS" [85 FR 68964, October 30, 2020]. These comments supplement DEEP's oral comments made at the hearing held by EPA on this proposal on November 12, 2020.

Section 110(a)(2)(D) of the Clean Air Act (CAA) requires every state to adopt in its state implementation plan (SIP) adequate provisions to prohibit sources within the state from emitting at levels which will contribute significantly to nonattainment in, or interfere with maintenance by, any other state. For the 2008 ozone national ambient air quality standards (NAAQS), the CAA required states submit these "Good Neighbor" SIPs by March 2011 to address the interstate transport of air pollution. States' failure to satisfy Good Neighbor obligations led EPA to promulgate a federal implementation plan in 2016, the Cross-State Air Pollution Rule (CSAPR) Update, as a partial remedy. By 2018, EPA promulgated the CSAPR Close-out Rule, reneging on its legal obligation to provide a full remedy to address ozone transport.

In 2020, nearly ten years after Good Neighbor SIPs were due, EPA is now proposing the Revised CSAPR Update in an incomplete remedy to address ozone transport. As demonstrated in our August 2017 attainment demonstration for the southwest Connecticut nonattainment area, and recognized in *Wisconsin vs EPA*, transport from upwind states accounts for Connecticut's ongoing failure to attain. Interstate ozone transport has prevented Connecticut from attaining the 2008 standard in 2015, 2018, and with near certainty, will again in 2021. Each failure to attain these health-based standards results in the continued physical harm to people who must breathe

unhealthy air, the further degradation of our environment, the reclassification to a more burdensome regulatory regime and the ensuing economic hardships associated with each aspect of these failures.

This is not the first time EPA has proposed an inadequate regional interstate transport rule at odds with the statutory language of the CAA. DEEP urges EPA to incorporate a meaningful framework for corrective action should EPA's projected outcomes fail to actually materialize. DEEP encourages EPA to make the recommended and appropriate corrections in this proposal as a more systematic way to address interstate transport.

Provided EPA commits to a corrective action process that assesses actual progress in attaining the ozone standard, Connecticut agrees that EPA must move forward with the Revised Cross-State Air Pollution Rule Update as quickly as possible to gain the beneficial but insufficient reductions it provides. Before finalizing this rule, EPA should make adjustments to the trading program to align reductions on a daily basis consistent with the short-term ozone standard. The trading program as designed will not address the environmental and health-related impacts associated with peak energy demand and the high ozone days associated therewith.

While DEEP recognizes that EPA's proposal is not a full remedy and does not address states' Good Neighbor SIP obligations, DEEP offers the attached comments for EPA's consideration in an effort to identify effective mechanisms to fully and finally address interstate transport of air pollution which continues to impact the citizens of Connecticut.

Sincerely,



Katherine S. Dykes
Commissioner

ATTACHMENT
CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
WRITTEN COMMENTS ON REVISED CROSS-STATE AIR POLLUTION RULE UPDATE
FOR THE 2008 OZONE NAAQS

The Connecticut Department of Energy and Environmental Protection (DEEP) respectfully submits the following comments in response to the Environmental Protection Agency's (EPA's) request for comments issued on October 30, 2020 (85 Fed. Reg. 68964). In light of the short timeline available to achieve attainment by the 2021 deadline, we encourage EPA to modify this proposal before finalizing. Below, DEEP highlights some of the flaws of the proposed rule and makes recommendations for EPA's consideration to more fully meet its obligation to address interstate ozone transport that violates the good neighbor provision of the Clean Air Act (CAA), as mandated by the court in *Wisconsin v. EPA*.

EPA's historical approach to modeling and again in this proposal under predicts ozone values in Connecticut. The proposed revised Cross-State Air Pollution Rule (CSAPR) update falls short of fulfilling EPA's obligations to address ozone transport under the Clean Air Act (CAA) and as mandated by the court in *Wisconsin v. EPA*. The Wisconsin ruling underscores the consistent inaccuracy of EPA's modeling approach to the CSAPR Update using Connecticut's Westport monitor in Fairfield County as an example. The monitor was projected by EPA to have a 2017 design value of 76.5 parts per billion (ppb) after Good Neighbor reductions from the CSAPR Update. Connecticut, which contributed only 3.89 ppb to the 76.5 ppb, would have had to reduce its contribution by 40% to attain the standard based on EPA's modeling. Meanwhile, nearby upwind states contributed as much as two to five times what Connecticut contributed to the Westport monitor, yet EPA's CSAPR Update provided not even a 0.5 ppb Good Neighbor benefit to Connecticut.

To further highlight the ineffectiveness of the Update, the actual 2017 design value for Westport was 83 ppb – well off the projected attainment level of less than 76 ppb. In fact, EPA modeling consistently under predicted Connecticut's 2017 projected design values, by as much as 7 to 8 ppb at shoreline monitors in southwest Connecticut, and projected attainment of the 2008 standard at nearly all Connecticut monitors in 2017.

EPA guidance for SIP modeling recommends evaluating evidence to determine if a particular modeling approach is valid for assessing future attainment status.¹ EPA should give greater consideration to evaluating and altering its own modeling approach to predict ozone concentrations at critical receptors. DEEP encourages EPA to reevaluate this approach.

Compounding the problem of model under prediction, EPA's approach continues to rely on a Supreme Court ruling, *EPA v. EME Homer City Generation*, which found EPA's apportionment method to be an efficient and equitable solution to the allocation problem of the Good Neighbor Provision. However, EPA's apportionment method has not yet led to attainment. Without attainment there can be no over-control and ultimately, no equitable solution to the problem of

¹ EPA, "Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, PM_{2.5}, and Regional Haze", December 2014.

ozone non-attainment. A revised approach is needed to ensure that impacted states like Connecticut, and our citizens, are not denied the benefit of an equitable and efficient transport remedy.

EPA’s technical support document for the revised CSAPR Update shows the model continues to perform poorly in Connecticut with under predictions of critical ozone values by 5 - 10 ppb.² Compounding this deficient performance, EPA uses a linear interpolation method to project design values for 2021. The table below shows EPA projected 2021 design values for four critical shoreline monitors in Connecticut. In an attempt to acknowledge some of the inaccuracies of the model to predict concentrations at shoreline monitors, EPA takes two approaches to calculating the final design value for 2021. In the typical 3x3 approach, EPA averages the modeled values in the nine grids surrounding and including the monitor. In the “no water” approach, grids that are predominantly classified as water cells (i.e. part of Long Island Sound) are excluded from consideration. The results of EPA’s projected 2021 design values using the multiple hybrid approaches are shown in the table and, to be realized, would require drastic reductions from actual (preliminary) design values for 2020.

Monitor	EPA Predicted Design Values (by method)				Preliminary 2020 Design Value from Monitored Data	4 th High Monitored Component of Design Value			Necessary 2021 4 th High to attain 2021 No Water Average
	2021 3x3 Average	2021 3x3 Maximum	2021 No Water Average	2021 No Water Maximum		2018	2019	2020	
Greenwich	75.7	76.3	75.0	75.7	82	86	84	77	64.0
Stratford	77.0	78.0	76.5	77.4	80	83	82	76	71.5
Westport	77.7	78.0	78.5	78.8	79	84	81	73	81.5
Madison	73.4	75.5	73.9	76.1	80	77	84	80	57.7

For example, to achieve the projected design values using EPA’s preferred “no water” approach, the monitors would need to record, next year, fourth highest values not exceeding those listed in the last column of the table. While the 4th highest monitored values did drop significantly in 2020, largely due to Covid-19 restrictions resulting in decreased emissions, it is unlikely that we will see a similar decrease next year.³ Even in the implausible event that the 4th highest monitored values were to decrease by the same magnitude as in 2020, values from the recent three years show the stark improbability of that happening at Madison and Greenwich.

Connecticut should not continue to be penalized for inadequate and untimely delivery of emission reductions from upwind states based on EPA’s flawed methods. The scant ozone benefit that the rule purports to provide, 0.21 ppb average improvement from the baseline to 2021 projected design values, at the three monitors EPA has analyzed in Connecticut is trivial and insufficient. Moreover, the full benefit of the rule is not fully realized until 2024, conflicting with the finding in *New York v. EPA* that reductions should occur by relevant attainment date – in this case July 20, 2021. If EPA moves forward with the rule based on such a flawed modeling

² Air Quality Technical Support Document for the Proposed Revised Cross-State Air Pollution Rule Update, EPA OAQPS, October, 2020.

³ Ozone season NOx emissions from Group 2 units in the Group 3 states totaled 132,000 tons in 2019 and dropped to 111,151 tons in 2020. Similar emissions reductions resulted from other sectors of the economy.

approach, Connecticut recommends the implementation of an ongoing process to take corrective action to recognize the divergence between the modeled projections and the actual monitored values.

EPA's cost effectiveness threshold of \$1,600 per ton is unacceptably low. EPA's cost effectiveness threshold is arbitrarily low and excludes consideration of worthwhile emission reduction strategies such as utilization of existing selective non-catalytic reduction technology at \$3,900/ton.

Connecticut does not significantly contribute to nonattainment in any other state, yet sources within the state are by regulation expected to control ozone precursor emissions at a cost in excess of \$13,000/ton.⁴ Meanwhile, EPA is concerned that nearby states, which contribute more to Connecticut's nonattainment than do any in-state sources, should pay one-tenth this cost to control emissions prohibited under the CAA. This proposal puts Connecticut at a significant economic disadvantage.

In using such a low cost threshold, EPA argues that it is providing a fair solution. A fair solution in EPA's view is one which avoids the potential for over control. As stated earlier, without attainment, there can be no over control.

EPA assumes that the downwind state will implement (if it has not already) an emissions control strategy for their sources that is of the same stringency as the upwind control strategy identified here. Consequently, EPA explicitly ensures that it is accounting for the downwind state's fair share (which is a part of the overcontrol evaluation).⁵

EPA is obligated to balance under control with over control if it is to provide an equitable solution. While acknowledging that its chosen threshold is trivial compared to Connecticut's control costs, EPA does not then go on to address the severity of under control that results from its selected threshold, but instead dismisses fairness to Connecticut with a footnote.⁶ Thus EPA skips a critical element of its process with respect to Connecticut. As Connecticut is only one of two areas EPA is considering for this analysis, and the only area in the northeast, the process provides no means to avoid under control and provide an equitable solution in the northeast.

Process for implementing contingency measures. EPA cannot continue to fail to provide adequate upwind reductions, restart the clock and claim insufficient time to obtain reductions. Given the likelihood that actual reductions will not materialize once again, EPA should work with the individual states to obtain further reasonable emissions reductions as contingency measures that can be put in place as corrective actions when projections fail to match reality.

EPA states that it will adjust the Group 3 emissions budgets "... to incentivize ongoing operation of identified emission controls to address significant contribution, until such time that our air quality projections demonstrate resolution of the downwind nonattainment and/or maintenance

⁴ Regulations of Connecticut State Agencies section 22a-174-22e(h) regarding control of nitrogen oxide emissions.

⁵ Revised CSAPR Update, 85 FR 69001.

⁶ EPA's footnote 130 of Revised CSAPR Update, 85 FR 69001: "This step is irrelevant in the analysis for the Connecticut receptors because that state shows no EGU reduction potential from the EGU control optimization or retrofit technologies identified given its already low-emitting fleet."

problems for the 2008 ozone NAAQS. No further budget adjustments would be made after that time (i.e., after the 2024 ozone season in EPA's proposed analysis)."⁷ EPA should include in this approach an ongoing assessment of the validity of its projections and work individually with each of the Group 3 states to have readily implementable emissions reductions strategies that will assure targets are met. Nonattainment areas are required to have contingency measures available in the event they do not meet their goals. Rather than shielding the Group 3 states with a weak and ineffective transport rule, EPA should work with each of the Group 3 states to assure they are actually prohibiting their contribution to downwind nonattainment.

Eliminating non-EGU emissions from the scope of the rule once again dismisses an opportunity to achieve necessary reductions from non-EGUs. In the 2016 final notice to adopt the CSAPR Update EPA stated that time constraints precluded EPA from fully addressing the requirements of CAA section 110(a)(2)(D)(i)(I) in the rule. EPA's objective at the time was to find inexpensive emissions reductions that could be implemented by the start of the next ozone season – which was only months away.⁸ Motivated to obtain emissions reductions prior to the July 20, 2018 attainment date for downwind states, EPA limited its focus in the CSAPR Update to immediately achievable emissions reductions from large electric generating units (EGUs) which were not optimizing existing controls. Recognizing that it had not completed a thorough analysis, EPA committed to seek further reductions from EGU and non-EGU sources so that states could fully address their transport obligations under CAA section 110(a)(2)(D)(i)(I), the good neighbor provision.⁹

Rather than complete the process of providing a full remedy for interstate transport, EPA instead promulgated the CSAPR close out rule (83 FR 31915, July 10, 2018) declining to consider further emissions reductions. Now in 2020 EPA is once again pressed to find emission reductions within months of the attainment date and again offers optimizing emission controls from existing EGUs as its proposed solution. Having failed to assess potential non-EGU emission reductions, EPA now asks for comment (p 68990) on which source sectors might be appropriate for further emission reductions. Appropriate control strategies for inclusion in good neighbor SIPs were recommended in a statement by the Ozone Transport Commission in 2017.¹⁰ Such suggested control strategies are still appropriate in 2020. In addition, EPA should consider

⁷ Revised CSAPR Update, 85 FR 68967.

⁸ From the CSAPR Update at 81 FR 74521: "Given the time constraints for implementing NOx reduction strategies, the EPA believes that implementation of a full remedy that includes emission reductions from EGUs as well as other sectors may not be achievable for 2017. However, a partial remedy is achievable for 2017 and therefore this rule focuses on these more immediately available reductions."

⁹ From the CSAPR Update at 81 FR 74522: "... EPA expects that a full resolution of upwind transport obligations would require emission reductions from sectors besides EGUs, including non-EGUs, and further EGU reductions that are achievable after 2017. Given the approaching July 2018 attainment deadline for the 2008 ozone NAAQS, developing a rule that would have covered additional sectors and emission reductions on longer compliance schedules would have required more of the EPA's resources over a longer rulemaking schedule to fully address. ... EPA is still in the process of developing information regarding available emission reductions from non-EGUs. Had the EPA waited to promulgate FIPs until that information was fully developed, we could not have assured emission reductions by 2017, in time to assist downwind states to meet the July 2018 attainment deadline. Accordingly, the EPA reasonably concluded that it was most prudent to promulgate a first step to address interstate transport for the 2008 ozone NAAQS that achieves those immediate reductions while addressing any remaining obligation that might be achievable on a longer timeframe in a separate rulemaking. The EPA intends to continue to collect information and undertake analyses for potential future emission reductions at non-EGUs that may be necessary to fully quantify states' interstate transport obligations in a future action."

¹⁰ https://otcair.org/upload/Documents/Formal%20Actions/GoodNeighSIPResolu_Final.pdf

additional controls for glass furnaces, cement kilns and municipal waste combustors as part of this proposal.

EPA should require existing NO_x controls to be optimized and run on a daily basis. This is critically important in Connecticut especially on those hot summer peak electricity demand days when ozone concentrations are the highest. Cap and trade programs are incapable of assuring emission reductions on a daily basis consistent with the short-term ozone standard, nor on high ozone days.

In fact, there is little justification for a trading program. Ozone is less now a regional problem than when nonattainment areas ran continuously across the eastern US. In its analysis, EPA focuses on two distinct and distant nonattainment areas in Connecticut and Texas. EPA's approach would allow trading between Louisiana and those states with higher levels of ozone contributing to Connecticut's ozone nonattainment. Yet EPA's analysis shows that Louisiana is not linked to Connecticut's ozone nonattainment. Such trading would negatively affect both Texas and Connecticut.

Good neighbor SIPs, are required to prohibit sources and activities within the upwind state from contributing to nonattainment in the downwind state. Trading can only alleviate the responsibility of the upwind state if attainment is realized. As EPA continues to rely on ineffective methods that failed previously, it is unlikely that attainment will be realized even at the late date EPA projects. Therefore, EPA should not dilute what little benefit states might gain by allowing trading.

Performance standards would improve the rule result. A more equitable approach, and suitable to the control strategy EPA has selected so far, would include performance standards. EPA has done sufficient evaluation in proposing its budgets that it should have suitable performance standards applicable to each of the units in the CSAPR Group 3 states.

The trading program as proposed will not provide sufficient emission reductions. Should EPA finalize the proposal with a trading program, despite the inadequacy of that approach to address high ozone days and provide equitable reductions to Connecticut, EPA must revise the program in several respects. First, higher emission budgets under the original CSAPR program have led to an oversupply of allowances. Any trading program under the revised CSAPR update should tighten state budgets to improve current levels of ozone nonattainment.

Connecticut is also concerned that emission budgets of several states, which contribute most to Connecticut's nonattainment, do not decrease in subsequent years after budgets are set under the rule. A Congressional Research Service report indicates that CSAPR budgets have historically been higher than the sum of actual emissions from affected sources leading to an oversupply of allowances and driving down the cost of allowances.¹¹ The consequence of this regulatory construct is that affected sources may choose to purchase allowances rather than reduce emissions. Recent allowance prices are near seventy dollars per ton, well below EPA's very low cost effectiveness threshold of \$1400-1600 per ton. Absent a performance standard, EPA should include an allowance price floor that effectively requires controls to be used.

¹¹ <https://fas.org/sgp/crs/misc/R45299.pdf> -- see pgs. 21 to 25

If EPA insists on maintaining a trading program, DEEP recommends that EPA strengthen the trading program by considering measures such as reducing the amount of Group 2 allowances converted to Group 3 allowances; tightening the state emission budgets by including 2020 ozone season data in the budget calculations; excluding Louisiana from the Group 3 trading program; and reducing the amount of time that units ceasing operations continue to receive allowance allocations.

The rule as proposed is inadequate to satisfy the CAA's mandatory prohibition on emissions from upwind states' emissions that contribute to nonattainment in Connecticut. Such upwind emissions will continue to cause nonattainment of the 2008 ozone standards beyond its most recent designated attainment date of July 20, 2021 as well as any future nonattainment date resulting from this inadequacy.

Thank you for your consideration of these comments. For the citizens of Connecticut impacted by unhealthy air, the development and implementation effective mechanisms to fully and finally address interstate transport of air pollution remains critically important.