January 29, 2021

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Hartford, Connecticut 06106

Submitted via electronic mail to kiernan.wholean@ct.gov

Re: Comments on State of Connecticut's Notice of Intent to Revise the State Implementation Plan for Air Quality: Regional Haze Plan for the Second Implementation Period (2018 - 2028)

Dear Mr. Wholean:

The National Parks Conservation Association (NPCA) and Appalachian Mountain Club, (hereinafter "Conservation Organizations") respectfully submit the following comments regarding the State of Connecticut's Notice of Intent to Revise the State Implementation Plan for Air Quality: Regional Haze Plan ("Haze Plan") for the Second Implementation Period (2018 - 2028).

The National Parks Conservation Association (NPCA) is the leading voice for our national parks - an independent, nongovernmental, nonpartisan organization that works to protect and enhance our national parks. Through a nationwide network of offices and with nearly 1.4 million members and supporters, we speak up for our more than 400 landscapes, seashores, cultural and historic places that make up our national park system. For the last 100 years, NPCA has educated and inspired policymakers and the public to ensure that our national parks are well-protected, well-funded and well-managed. NPCA leverages the unique space national parks occupy in federal law and policy and in the court of public opinion, and advocates for policies and actions needed to restore them and ensure they thrive across generations. NPCA is an active nation-wide in advocating for strong air quality requirements in our parks, including submission of petitions and comments relating to visibility issues, regional haze State Implementation Plans, global warming and mercury impacts on parks, and emissions from individual power plants and other sources of pollution affecting National Parks.

Conservation Organization members live near, work at, and recreate in all the Class I areas in the Northeast, including those identified in the proposed SIP Connecticut's proposed source-specific Regional Haze SIP that does not meet the legal requirements of the Clean Air Act and federal regulations and does not address emissions from the sources that emit visibility impairing pollution contributing to regional haze affecting Class I areas.

As detailed below, NPCA describes the flaws in MANE-VU's assessment, demonstrating that it does not meet the Clean Air Act's legal requirements. Moreover, Connecticut does not provide any state-specific justification for the proposed extinction threshold. The result of Connecticut's reliance on the flawed assessment is that no sources are identified for a reasonable progress four factor analysis and no emission reducing measures are included in the SIP for the second planning period. Additionally, contrary to State law, the proposal does not consider impacts to environmental justice communities. Connecticut's flawed and unreasonable proposal threatens to impede - if not reverse - progress in improving visibility at the Class I areas its sources impact. Connecticut must evaluate the below identified sources through a four factor analysis, which includes consideration of environmental justice concerns, and to the extent co-benefits of greenhouse gas reductions can be achieved through implementation of the state's haze plan, we recommend it be considered, and include in its SIP emission reducing measures to achieve reasonable progress as mandated by the Clean Air Act and implementing regulations.

Introduction and Background

The Northeastern United States is home to many national parks and wilderness areas, which are iconic and treasured landscapes, which include the following Class I areas: Acadia National Park; Brigantine Wilderness Area; Dolly Sods Wilderness Area; Lye Brook Wilderness Area; James River Face Wilderness; Great Gulf Wilderness Area; Otter Creek Wilderness Area; Moosehorn Wilderness Area; Presidential Range-Dry River Wilderness Area; and Shenahdoah National Park.

Congress set aside these national parks and wilderness areas to protect our natural heritage for generations. These protected areas also generate millions of dollars in tourism revenue, provide habitat for a range of species, and provide year-round recreational opportunities for residents. These special places are designated "Class I areas" under the Clean Air Act ("CAA") and as such, their air quality is entitled to the highest level of protection. Unfortunately, that requirement and promise is unfulfilled because the air in all Class I areas, including in those in the Northeasten U.S., remain polluted by industrial sources, including the two sources covered by this proposal.

To improve air quality in our most treasured landscapes, Congress passed the visibility protection provisions of the Clean Air Act in 1977, establishing "as a national goal the prevention of any future, and the remedying of any existing, impairment of visibility in the mandatory class I Federal areas which impairment results from manmade air pollution."[1] "Manmade air pollution" is defined as "air pollution which results directly or indirectly from human activities."[2] In order to protect Class I areas' "intrinsic beauty and historical and

[1] 42 U.S.C. § 7491(a)(1).
[2] *Id.* § 7491(g)(3).

archeological treasures," the regional haze program establishes a national regulatory floor and requires states to design and implement programs to curb haze-causing emissions within their jurisdictions. Each state must submit for EPA review a SIP designed to make reasonable progress toward achieving natural visibility conditions.[3] This *long-term strategy* SIP covers a period of ten to fifteen years, at which point the SIP is revised.[4]

A regional haze SIP must provide "emissions limits, schedules of compliance and other measures as may be necessary to make reasonable progress towards meeting the national goal."[5] Two of the most critical features of a regional haze SIP are the requirements for installation of Best Available Retrofit Technology ("BART") limits on pollutant emissions and a long-term strategy for making reasonable progress toward the national visibility goal.[6] The haze requirements in the Clean Air Act present an unparalleled opportunity to protect and restore regional air quality by curbing visibility-impairing emissions from some a host of polluting facilities that harm our communities and muddy our skies.

Implementing the regional haze requirements promises benefits beyond improving views. Pollutants that cause visibility impairment also harm public health. For example, oxides of nitrogen ("NO_X") are a precursor to ground-level ozone which is associated with respiratory disease and asthma attacks. NO_X also reacts with ammonia, moisture and other compounds to form particulates that can cause and/or worsen respiratory diseases, aggravate heart disease, and lead to premature death. Similarly, sulfur dioxide ("SO_2") increases asthma symptoms, leads to increased hospital visits. Nitrogen and sulfur gases emitted into the atmosphere can become particulate matter through a chemical transformation and when dissolved in water, become acid rain, creating devastating effects on our ecosystems, particularly in the eastern U.S. There are numerous negative ecosystem effects of acid deposition like depletion of soil nutrients, aluminum mobilization, and acidification in waters that lead to accelerated plant die-off, slower plant growth and damage to leaves and overall decreases in species diversity. Fine particulate matter, PM2.5, is one of the most dangerous of our criteria pollutants, with no real known safe level of exposure for humans. In addition to fine particulate matter being a lethal air pollutant for humans to breathe, it is a primary driver of haze, or visibility impairment, while also negatively affecting many other ecosystem functions. Furthermore, breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system as well as other organs. Some VOCs can cause cancer. Outdoors, VOCs can cause similar health effects, but also can react with nitrogen oxides to produce ozone pollution, the nation's most widespread outdoor air pollutant. NO_X, SO_2, PM and VOC emissions also harm terrestrial and aquatic plants and animals through acid rain as well as through deposition of nitrates (which in turn cause ecosystem changes including eutrophication of mountain lakes).

These public health harms have a disproportionately adverse effect on minority and low income populations. Connecticut's proposed SIP action has entirely failed to analyze the susceptibility of communities of color and lower socioeconomic status to different levels of pollution. As discussed in Section V of our comments, this proposal does nothing to remediate

[3] *Id.* § 7491(b)(2).
[4] *Id.* § 7491(b)(2)(B).
[5] 42 U.S.C. § 7491(b)(2).
[6] *Id.* § 7491(b)(2)(A), (B); 40 C.F.R. § 51.308(e), (f).

Connecticut's environmental justice issues - despite legal requirements to assist environmental justice neighborhoods disproportionately impacted from the public health harms caused by air pollution. Moreover, it is critical to consider the cumulative impacts of multiple stressors on these communities when assessing health impacts, including a population's exposure to multiple pollutants, exposure to higher levels of multiple pollutants, and chronic exposure to lower levels of multiple pollutants. None of which was done in the proposed SIP. The State's failure to consider the disproportionate impact on those closest to the sources has resulted in a flawed analysis. Further ignoring these communities in the midst of a respiratory pandemic is unconscionable, and further supports our request that Connecticut renotice this proposal and provide for a second round of public notice and comment.

I. The Regional Haze Reasonable Progress Legal Requirements

A. EPA's Regional Haze Regulations

In developing its long-term strategy, a state must consider its anthropogenic sources of visibility impairment and evaluate different emission reduction strategies including and beyond those prescribed by the BART provisions.[7] A state should consider evaluating "major and minor stationary sources, mobile sources and area sources."[8] At a minimum, a state must consider the following elements:

> (A) Emission reductions due to ongoing air pollution control programs, including measures to address reasonably attributable visibility impairment;
> (B) Measures to mitigate the impacts of construction activities;
> (C) Emissions limitations and schedules for compliance to achieve the reasonable progress goal;
> (D) Source retirement and replacement schedules;
> (E) Smoke management techniques for agriculture and forestry management purposes including plans as currently exist within the State for these purposes;
> (F) Enforceability of emission limitations and control measures; and
> (G) The anticipated net effect on visibility due to projected changes in point, area, and mobile emissions over the period addressed by the long-term strategy.[9]

Additionally, a state

> Must include in its implementation plan a description of the criteria it used to determine which sources or groups of sources it evaluated *and* how the four factors were taken into consideration in selecting the measures for inclusion in its long-term strategy.[10]

In developing its plan, the State must document the technical basis for the SIP, including monitoring data, modeling, and emission information, including the baseline emission inventory

[7] 40 C.F.R. § 51.308(f).
[8] *Id.* § 51.308(f)(2)(i).
[9] *Id.* § 51.308(f)(2)(iv).
[10] 40 C.F.R. § 51.308(f)(2)(i) (emphasis added).

upon which its strategies are based.[11] A state's reasonable progress analysis must consider the factors identified in the Clean Air Act and regulations. *See* CAA 169A(g)(1); 40 C.F.R. 51.308(f)(2(i))(" the costs of compliance, the time necessary for compliance, the energy and non-air quality environmental impacts of compliance, and the remaining useful life of any potentially affected anthropogenic source of visibility impairment.") Further, the state's SIP revisions must meet certain procedural and consultation requirements.[12] The state must consult with the Federal Land Manager(s) and look to the Federal Land Managers' expertise of the lands and knowledge of the way pollution harms them to guide the state to ensure SIPs do what they must to help restore natural skies.[13] The rule also requires that in "developing any implementation plan (or plan revision) or progress report, the State must include a description of how it addressed any comments provided by the Federal Land Managers."[14]

Furthermore, the duty to ensure reasonable progress requirements are met for purposes of the SIP rests with the state. While regional planning organizations such as MANE-VU play an important role in convening states and providing support in regional haze planning, their interpretations of regulatory requirements and recommended approach are not governing. Therefore, as discussed below in Section III since MANE-VU's assessments do not meet the legal requirements. Connecticut must conduct independent analyses to inform its reasonable progress determination. Moreover, with regard to Connecticut's obligations regarding the Class I areas outside the State, the rule requires that it

> …must submit a long-term strategy that addresses regional haze visibility impairment … for each mandatory Class I Federal area located outside the State that may be affected by emissions from the State.[15]

As discussed in Section II of our comments, the State's proposed long-term strategy SIP revision for this planning period is inconsistent with this rule. The State's proposal includes such a high threshold for which source's emissions it will evaluate for emission reduction measures that the high threshold eliminates *all its sources* from evaluation.

B. EPA's 2019 Regional Haze Guidance is Deeply Flawed and Connecticut Should Not Wholly Rely On It

In May 2020, NPCA shared the petition it submitted to the previous EPA Administrator - which sought reconsideration of the 2019 RH guidance[16] - alongside a cover letter to Connecticut.[17] In addition to NPCA, Sierra Club, Natural Resources Defense Council, Western

[11] 40 C.F.R. § 51.308(f)(2)(i).
[12] For example, in addition to the RHR requirements, states must also follow the SIP processing requirements in 40 C.F.R. § § 51.104, 51.102.
[13] 40 C.F.R. § 51.308(i).
[14] *Id.* § 51.308(i)(3).
[15] *Id.* § 51.308(f)(2).
[16] EPA issued the Final Guidance on August 20, 2019 via Memorandum from Peter Tsirigotis, Director at EPA Office of Air Quality Planning and Standards to EPA Air Division Directors.
[17] "Petition for Petition for Reconsideration of Guidance on Regional Haze State Implementation Plans for the Second Implementation Period," submitted by National Parks Conservation Association, Sierra Club, Natural Resources Defense Council, Coalition to Protect America's National Parks, Appalachian Mountain Club, Western

Environmental Law Center, Appalachian Mountain Club, Coalition to Protect America's National Parks, and Earthjustice, signed the petition for reconsideration. As of the date of this comment letter, EPA has not responded to the Petition. Because EPA's 2019 Regional Haze Guidance is deeply flawed, Connecticut should not wholly rely on it. Instead, the State must closely adhere to the regulation itself and work to achieve the Clean Air Act goal of Class I visibility restored to natural conditions.[18]

II. The State's Proposed SIP Does Not Evaluate and Analyze Emission Reduction Measures Necessary to Make Reasonable Progress Based on a Four-Factor Analysis

The RHR requires, in part, that a state's long-term strategy meet the following requirements:

> The State must evaluate and determine the emission reduction measures that are necessary to make reasonable progress by considering the costs of compliance, the time necessary for compliance, the energy and non-air quality environmental impacts of compliance, and the remaining useful life of any potentially affected anthropogenic source of visibility impairment. The State should consider evaluating major and minor stationary sources or groups of sources, mobile sources, and area sources. The State must include in its implementation plan a description of the criteria it used to determine which sources or groups of sources it evaluated and how the four factors were taken into consideration in selecting the measures for inclusion in its long-term strategy. In considering the time necessary for compliance, if the State concludes that a control measure cannot reasonably be installed and become operational until after the end of the implementation period, the State may not consider this fact in determining whether the measure is necessary to make reasonable progress.

40 C.F.R. §51.308(f)(2)(i).

Connecticut did not directly address these requirements, instead relying on and primarily referencing the MANE-VU assessment for targeting sources to conduct a four-factor analysis and then proceeding without undertaking any four-factor analysis for such MANE-VU targeted

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Environmental Law Center and Earthjustice, to former EPA Administrator Andrew Wheeler (May 8, 2020). ("Conservation Organizations Petition"). Copy enclosed.

[18] The Petition explained that, as issued, the Final Guidance conflicts with this statutory objective, previous rulemaking and guidance; misdirects states as to how they can go about complying with their legal obligations to make reasonable progress towards restoring natural visibility to protected public lands; and otherwise fails to set expectations that comport with legal requirements for the second planning period. Further, we petitioned the prior Administrator to replace it with guidance that comports with the Clean Air Act ("CAA") and the Regional Haze Rule, 42 U.S.C. §§ 7491, 7492; 82 Fed. Reg. 3078 (Jan. 10, 2017); 71 Fed. Reg. 60,612 (Oct.13, 2006); 70 Fed. Reg. 39,104 (July 6, 2005); 64 Fed. Reg. 35,714 (July 1, 1999), and aids states in making progress towards achieving the national goal of natural visibility conditions at all Class I areas. Conservation Organizations Petition at 1-2. Our Petition includes a detailed analysis of the issues. As of the date of this comment letter, EPA has not responded to our Petition. Until the current EPA withdraws the illegal approaches in the 2019 guidance, we trust states will not follow it instead adhering closely to the regulation itself and work to achieve the Clean Air Act goal of Class I visibility restored to natural conditions.

sources. Connecticut provides a short summary of the MANE-VU assessment, noting that it included the following:

1. Q/d assessment tool, enhanced by parameter C to account for wind direction, and
2. CALPUFF modeling, which only included three sources from Connecticut.
3. Using the Hybrid Single-Particle Lagrangian Integrated Trajectory (HYSPLIT) model to provide a qualitative assessment of results.[19]

There are numerous deficiencies in the State's approach. First, it relies on MANE-VU requests for defining sources to target for a four-factor analysis to those sources, but does not disclose what screening threshold was used, and rather refers the public to the MANE-VU documents. The MANE-VU assessment used a screening threshold that only included those sources that have the potential for 3.0 Mm^{-1} or greater visibility impacts at any MANE-VU mandatory Class I area. Second, Connecticut does not explain how the 3.0 Mm^{-1} or greater visibility impact threshold was selected. EPA's August 20, 2019 Guidance on regional haze plans for the second implementation period states that "[w]hatever threshold is used [to determine sources to evaluate in a four-factor analysis], the state must justify why the use of that threshold is a reasonable approach, i.e., why it captures a reasonable set of sources of emissions to assess for determining what measures are necessary to make reasonable progress."[20] The RHR requires that the state "include in its implementation plan a description of the criteria it used to determine which sources or groups of sources it evaluated and how the four factors were taken into consideration in selecting the measures for inclusion into its long term strategy."[21] Connecticut's proposal does not justify use of this threshold. Thus, the proposed SIP does not meet these requirements and the State must remedy this in a revised SIP revision.

Third, use of the same extinction threshold for selecting sources for consideration of pollution controls for each of the Class I areas evaluated in Connecticut's proposed regional haze SIP revision has not been justified. In its August 20, 2019 guidance, EPA elaborates on the many things to consider when setting a threshold level for selecting sources for analysis of reasonable progress controls:

> The appropriate threshold for selecting sources may reasonably differ across states and Class I areas due to varying circumstances. In setting a threshold, a state may consider the number of emissions sources affecting the Class I areas at issue, the magnitude of the individual sources' impacts, and the amount of anthropogenic visibility impairment at the Class I area. [fn41 omitted]. Various visibility metrics may be appropriate to use, but metric thresholds should be developed in consideration of the magnitude of an individual metric at an individual Class I area. For example, if modeling a full year, the maximum modeled day visibility impact may be several orders of magnitude larger than the impact averaged across the 20 percent most impaired days. There may be other approaches and factors that would be appropriate for states to use when setting and explaining such a threshold. If quantifiable, the amount of anthropogenic visibility impairment from a

[19] Connecticut Proposed SIP at 45.
[20] *See* U.S. EPA, Guidance on Regional Haze State Implementation Plans for the Second Implementation Period at 19 (Aug. 19, 2019)
[21] 40 C.F.R. 51.308(f)(2).

> source can be compared to the total anthropogenic impairment at a Class I area. For example, a threshold of "X" Mm^{-1} may be reasonable if current visibility impairment is mostly due to relatively few sources with impacts above "X" Mm^{-1}, but may not be reasonable if current visibility impairment is due to a large number of sources each with impacts below "X" Mm^{-1}. A similar concept applies if source-specific visibility impacts are expressed as percentages of total light extinction.

U.S. EPA, "Guidance on Regional Haze State Implementation Plans for the Second Implementation Period," at 19 (Aug. 20, 2019).

Fourth, this extinction threshold for defining sources to evaluate for additional controls to achieve reasonable progress towards the national visibility goal is unreasonably high and at odds with the Clean Air Act mandate to make progress towards the national goal. Indeed, a much lower threshold for defining whether a BART-eligible source should be subject to a BART analysis was used in the first round of regional haze implementation plans. Specifically, if a BART-eligible source had a 0.5 deciview impact on a Class I area, reflecting an impact of approximately a 5% change in extinction, the unit was subject to a BART analysis. There is no justification to use a much higher threshold, which equates to a 9% to 27% change in manmade extinction at the Class I areas impacted by the MANE-VU states, for defining sources to control in this regional haze plan for the second implementation period. Connecticut has not provided any justification for use of a 3.0 Mm^{-1} threshold to determine sources to evaluate for controls, and we do not think any valid justification can be provided for such a high extinction threshold for defining sources to evaluate for controls to make reasonable progress. We urge Connecticut to replace this generic threshold with Class I specific figures that will provide the contours through which the state may identify sources to assess for a four-factor analysis.

Sixth, not only must Connecticut implement and document a reasoned basis for any extinction level used for selecting sources for a four-factor analysis of controls, it also must make clear how each source's visibility impacts are to be determined. For example, were the sources' potential emissions modeled, given that the MANE-VU recommended control is to evaluate sources with the "potential for" 3.0 Mm^{-1} or greater visibility impacts at any MANE-VU Class I area? What visibility-impairing pollutants were modeled for each source? Were all units modeled for all sources, or just certain emission units? Were sources modeled for impacts on the 20% worst days or on an annual average basis, or some other timeframe? The technical approach that the state employed to determine source-specific visibility extinction needs to be identified and subject to public review and comment, pursuant to 40 C.F.R. 51.308(f)(2). Any proposed extinction threshold for defining sources to target for controls is only as good as the underlying technical analysis to define if a source exceeds the extinction threshold.

Seventh, the reasonable progress determination should necessarily have a lower threshold than BART, because BART was intended to create emission limitations for the low hanging fruit and we know that to achieve clear skies we will need to dig deeper for emission reductions each round to make progress.

Eighth, and importantly, the Act requires that the required long-term strategy adopted in the Connecticut's SIP make reasonable progress toward the national goal of remedying *any*

existing impairment.[22] Emissions from the sources in Connecticut impair visibility in Class I areas. Therefore, the State cannot set a threshold that so high as to exclude EVERY state source from a four factor RP analysis. The State's proposed SIP is clearly inconsistent with the Act's requirement as it sets a threshold that prohibits it from remedying existing impairment.

Connecticut must address these requirements and justify any and all extinction thresholds that it relies on for each Class I area impacted by its sources. We request that Connecticut provide such explanations with a new period for public review and comment.

III. The State's Proposed SIP Does Not Contain the Required Four-Factor Analyses

Connecticut did not provide an evaluation of emissions from its sources and their impacts to the Class I area to calculate a Q/d value, thus, we turn to the NPS evaluation submitted to Connecticut earlier in the process for our comments.[23] Based on the Q/d values, it's clear that Connecticut needs to conduct a Four-Factor Analysis for four municipal waste combustion sources to inform its reasonable progress determination, specifically:

- Wheelabrator Bridgeport LP,
- CRRA/Mid-Connecticut,
- Covanta Southeastern CT, and
- Wheelabrator Lisbon LP.[24]

While some of the facilities have installed pollution controls, that does not mean the facilities should not be evaluated for further emission reductions to achieve reasonable progress towards the national visibility goal. Although these waste combustors recently installed selective non-catalytic reduction controls to limit emissions of nitrogen oxides and such reductions will achieve lower than 2006 New Source Performance Standards for municipal waste combustors other like sources have or will achieve lower short term NOx rates, as the NPS informed Connecticut at least two other states require tighter limits for waste combustors: the Montgomery County Resource Recovery Facility, in Maryland is achieving a 30-day rolling average NOx emissions rate of 105 ppmv;[25] the Covanta Arlington/Alexandria and Covanta Fairfax facilities in Virginia will achieve daily average rates of 110 ppmvd @7% O_2 and annual average rates of 90 ppmvd @ 7% O_2.[26] It is incumbent on the State to review these requirements and evaluate the four Connecticut municipal waste combustors through a four factor analysis to determine whether the same is achievable and document its analysis and determination making it available for public review and comment.

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[22] 42 U.S.C. 7591(a)(1), (b)(2), (b)(2)(B).

[23] Email from Melanie Peters, Air Resources Division, NPS, to Kiernan Wholean, Bureau of Air Management Connecticut Department of Energy and Environmental Protection, Wendy Jacobs, Connecticut Department of Energy and Environmental Protection, "CT Regional Haze SIP Consultation," Attachment: "Updated Analysis Supporting ARD Recommendations to Connecticut for 4-Factor Analysis of Municipal Waste Combustors," at 1 (March 31, 2020) (the NPC attachment updated information from its October 2018 letter to Connecticut.) ("NPS March 2020 Updated Analysis")

[24] *Id.* at 2.

[25] *Id.*

[26] *Id.*

IV. The State's Proposed SIP Does Not Contain Provisions to Ensure Emission Limitations are Permanent and Enforceable and That Permits *Complement* the Act's Reasonable Progress Requirements

The Clean Air Act requires states to submit implementation plans that "contain such emission limits, schedules of compliance and other measures as may be necessary to make reasonable progress toward meeting the national goal" of achieving natural visibility conditions at all Class I Areas.[27] The Regional Haze Rule requires that states must revise and update its regional haze SIP, and the "periodic comprehensive revisions must include the "enforceable emissions limitations, compliance schedules, and other measures that are necessary to make reasonable progress as determined pursuant to [51.308](f)(2)(i) through (iv)."[28] The emission limitations and other requirements of the regional haze rule must be adopted into the SIP. Finally, Under the Reginal Haze Rule, RPGs adopted by a state with a Class I area must be based only on emission controls measures that have been adopted and are enforceable.[29]

The State's proposal explains that it intends to meet the MANE-VU Ask regarding operation of control equipment at the 13 facilities identified in Table 5-1[30] by relying on Clean Air Act Title V permits for these sources. This particular Ask requires that

> Electric Generating Units (EGUs) with a nameplate capacity larger than or equal to 25 MW with already installed NO_X and/or SO_2 controls - ensure the most effective use of control technologies on a year-round basis to consistently minimize emissions of haze precursors, or obtain equivalent alternative emission reductions[31]

The State's proposed reliance on Title V permits in the SIP context is inconsistent with the Act, EPA's regulations and guidance. EPA's Guidance explains that the requirements in 40 C.F.R. § 51.308(d)(3)(v)(F):

> [R]equires SIPs to include enforceable emission limitations and/or other measures to address regional haze, deadlines for their implementation, and provisions to make the measures practicably enforceable including averaging times, monitoring requirements, and record keeping and reporting requirements.[32]

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[27] 42 U.S.C. § 7491(a)(1), (b)(2).
[28] 40 C.F.R. § 51.308(f)(2); 40 C.F.R. § 51.308(d)(3)(v)(F)(Enforceability of emission limitations and control measures).
[29] 40 C.F.R. § 51.308(f)(3).
[30] Connecticut Proposed SIP at 49.
[31] Connecticut Proposed SIP at 48.
[32] "EPA Guidance on Regional Haze State Implementation Plans for the Second Implementation Period," at 42-43 (August 20, 2019), https://www.epa.gov/sites/production/files/2019-08/documents/8-20-2019_-_regional_haze_guidance_final_guidance.pdf. (While NPCA filed a Petition for Reconsideration regarding EPA's issuance of the 2019 Guidance (Attachment 2), it does not dispute the information in the Guidance referenced here regarding enforceable limitations, which cite to the "General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990, 74 Fed. Reg. 13498 (April 16, 1992)..

Another example in Connecticut's proposed SIP that shows its misunderstanding of "federally enforceability" for purposes of SIP requirements is the following. The USDA Forest Service expressed concern regarding a relatively high emission rate allowed under a permit and asked the State to consider performing a four-factor analysis."[33] Connecticut's response offers that the "Title V and NSR permits" are "federally enforceable" and require the permittee to report actual emissions,[34] further explaining that "DEEP requires this reporting so it can evaluate if any increase in emissions over the baseline will trigger further permitting and control technology reviews resulting from increased use of the equipment."[35] Connecticut's response does not recognize that the reasonable progress requirements apply to all sources, there is not an off-ramp for sources that hold permits. Moreover, the regional haze emission limitations and other requirements must be embodied in the SIP. A state's reliance on terms and conditions in Title V and NSR permits is inconsistent with the Clean Air Act, EPA's regulations and guidance that requires the SIP emission limitation be adopted into the SIP.

Connecticut's proposed SIP revisions do not include emissions limitations with practicably enforceable provisions. Rather, they merely reference that the list of sources covered by this Ask have Title V permits. Moreover, EPA's recent Guidance recognizes EPA's long-standing position that while the SIP is the basis for demonstrating and ensuring state plans meet the regional haze requirements, state-issued permits must complement the SIP and SIP requirements.[36] State-issued permits must not frustrate SIP requirements.[37] For example, sources with PSD permits under Title I must not hold permits that allow emissions that conflict with SIP requirements.[38] Additionally, the Act's Title V operating permits collect and implement all the Act's requirements – including the requirements in the SIP – as applicable to the particular permittee. Furthermore, Title V permits are only good for a period of five years and may expire under certain conditions. Therefore, there is no assurance that Title V permit terms and conditions will be permanent since they may lapse. Finally, Title V permits must not hold such permits if they contain permit terms and conditions that conflict with the SIP and Clean Air Act SIP requirements.

The proposed SIP for these 13 facilities lacks the required "enforceable emissions limitations, compliance schedules, and other measures that are necessary to make reasonable progress." and thus would allow the companies to modify operations, increase emissions impact the Class I areas for many years without first meeting reasonable progress emission limitation and other necessary requirements. Contrary to the requirement to ensure permits complement the SIP, Connecticut's proposed SIP lists the PSD permits issued to these facilities and the SIP does contain enforceable emissions limitations for the following 13 facilities:

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[33] Connecticut Proposed SIP at pdf 80 ("The EPA's eGRID2018 database indicates that Middletown Unit 4 has a relatively high sulfur dioxide emission rate of 0.283 lb/MMBtu, but that the unit only ran for 33 hours in 2016. We are not aware of any limit on the unit's annual operations and assume the unit could run at maximum capacity in the future. That being the case, please consider performing a four-factor analysis for this unit.")
[34] Connecticut Proposed SIP at pdf 80.
[35] *Id.*
[36] 74 Fed. Reg. 13498, 13568 (April 16, 1992).
[37] Furthermore, to the extent stationary source are granted permits by rule or other mechanisms, these other categories that allow construction and operation must also complement SIP requirements.
[38] Additionally, the proposed SIP revisions fail to contain source-specific "measures to mitigate the impacts of construction activities." 40 C.F.R. § 51.308(d)(3)(v)(B).

- Bridgeport Energy
- Bridgeport Harbor Station
- CPV Towantic
- Devon
- Kleen Energy Systems Project
- Lake Road Generating Company
- Middletown[39]
- Middletown[40]
- Milford Power Company LLC
- New Haven Harbor
- Pratt & Whitney, East Hartford
- Wallingford Energy, LLC
- Waterbury Generation.[41]

Similarly, Connecticut's suggestion that it plans to meet Element 4, which requires it to lock in emission reductions necessary for the RH SIP program from fuel switching[42] via Title V permitting and permit processing rules is also misplaced. This element also does *not* meet the requirements for enforceable emission limitations.

Finally, the State's analysis of the proposed SIP is internally inconsistent, which further demonstrates the arbitrariness of its proposal. The State's response to the Ask regarding energy efficiency summarizes its efforts but does not propose including any of its energy efficiency efforts in the SIP. Its explanation for excluding the energy efficiency efforts is that none of them are "conducive to satisfying the *permanent and enforceable criteria* necessary for inclusion in a state implementation plan."[43] Thus, it appears the State appreciates what is needed to make the emission limitations permanent and enforceable for purposes of the RH SIP, and yet, as discussed above in this Section of our comments, has refused to make the emission limitations enforceable.

V. Connecticut Should Analyze the Environmental Justice Impacts in its Four Factor Analysis, and Should Ensure this SIP Considers Impacts to Environmental Justice Communities

In October 2020, Connecticut's Senate and House of Representatives adopted enhancements to the State's Environmental Justice Law.[44] This law, in addition to Connecticut's environmental justice policies and programs, "actively seeks ways to assist neighborhoods by

[39] Connecticut Proposed SIP at 49 ("Unit ID 12 to 15").
[40] *Id.* Unit 3.
[41] *Id.*
[42] Connecticut Proposed SIP at 50-51.
[43] Connecticut Proposed SIP at 52.
[44] Connecticut September 2020, Special Session, House Bill 7008, Public Act 20-6, "An Act Concerning Enhancements to State's Environmental Justice Law," available at https://cga.ct.gov/2020/ACT/PA/PDF/2020PA-00006-R00HB-07008SS3-PA.PDF. ("Conn. Gen. Stat. § 22a-20a (2020)")

responding to needs identified by them."[45] The Connecticut Department of Energy and Environmental Protection's website encourages the public to speak to them about what needs to be done to protect and improve the environment in environmental justice neighborhoods.[46]

The State's implementation of its authority further tells the public that the "Environmental Justice Program actively seeks ways to assist neighborhoods by responding to needs identified by them" and provides examples of issues commonly raised by residents that the program can assist" with, which includes "air pollution."[47] Moreover, the State statute not only provides opportunities for an EJ community to participate in decisions about facilities, but also provides that "the public's participation may influence the regulatory agency's decision."[48]

Additionally, Connecticut's Senate and House of Representatives recognized that environmental justice communities are impacted by harms reasonably related to facilities, which include, but are not limited to "impacts on the environment … air quality … asthma rates … traffic, parking and noise."[49] The sources covered by the regional haze program clearly contribute to these impacts and harms, have been doing so for many years.[50]

Further, to be considered under the Connecticut laws and the Environmental Justice Policy, the facilities must the located in an "environmental justice community," which is defined as either:

1. On the Connecticut Department of Economic and Community Development (DECD) list of distressed municipalities (Figure 1, below), or
2. In a defined census block. These municipalities are not distressed, but have census block groups with 30% of their population living below 200% of the federal poverty level (Table 2, below).[51]

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[45] DEEP Environmental Justice Program Overview, available at https://portal.ct.gov/DEEP/Environmental-Justice/Environmental-Justice-Program-Overview.
[46] *Id.* ("You are encouraged to speak to us about what needs to be done to protect and improve the environment in your community.")
[47] *Id.*
[48] Conn. Gen. Stat. § 22a-20a(a)(3) (2020).
[49] Conn. Gen. Stat. § 22a-20a(a)(4) (2020).
[50] "As Justice Douglas pointed out nearly [fifty] years ago, '[a]s often happens with interstate highways, the route selected was through the poor area of town, not through the area where the politically powerful people live.' " *Jersey Heights Neighborhood Ass'n v. Glendening*, 174 F.3d 180, 195 (4th Cir. 1999) (King, J., concurring) (quoting *Triangle Improvement Council v. Ritchie*, 402 U.S. 497, 502, 91 S.Ct. 1650, 29 L.Ed.2d 61 (1971) (Douglas, J., dissenting)); *see also* Nicky Sheats, *Achieving Emissions Reductions for Environmental Justice Communities Through Climate Change Mitigation Policy*, 41 Wm. & Mary Envtl. L. & Pol'y Rev. 377, 382 (2017) ("There is evidence that a disproportionate number of environmental hazards, polluting facilities, and other unwanted land uses are located in communities of color and low-income communities."). "The purpose of an environmental justice analysis is to determine whether a project will have a disproportionately adverse effect on minority and low income populations." *Mid States Coal. for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 541 (8th Cir. 2003). "Although the term 'environmental justice' is of fairly recent vintage, the concept is not." *Jersey Heights*, 174 F.3d at 195 (King, J., concurring)." *Friends of Buckingham v. State Air Pollution Control Board*, 947 F.3d 68, 86 (2020).
[51] *See*, DEEP, "Environmental Justice Communities," available at https://portal.ct.gov/DEEP/Environmental-Justice/Environmental-Justice-Communities. *See also*, Conn. Gen. Stat. § 22a-20a(a)(1) (2020).

Figure 1. Connecticut's 2020 Distressed Municipalities[52]

Ansonia	**East Hartford**	**Montville**	**Preston**	**Voluntown**
Bridgeport	**East Haven**	**New Britain**	**Putnam**	**Waterbury**
Bristol	**Griswold**	**New Haven**	**Sprague**	**West Haven**
Chaplin	**Hartford**	**New London**	**Stratford**	**Winchester**
Derby	**Meriden**	**Norwich**	**Torrington**	**Windham**

Figure 2. Connecticut's Defined Census Blocks within Affected Towns[53]

Bloomfield	Shelton
Danbury	Southington
East Haven	Stamford
East Windsor	Stonington
Fairfield	Stratford
Griswold	Thompson
Groton	Wallingford
Hamden	Waterford
Manchester	West Hartford
Middletown	Westbrook
North Haven	Wethersfield
Norwalk	Windsor
Plainville	Windsor Locks

The reasonable progress sources Connecticut has ignored are covered by the State's law as they are "major sources of air pollution, as defined by the federal Clean Act."[54] For example, sources covered by Connecticut's laws include: "electric generating facility[ies] with a capacity of more than ten megawatts,"[55] which includes the 13 facilities discussed in Section IV of our

[52] "Connecticut Department of Economic and Community Development (DECD) list of distressed municipalities," available at https://portal.ct.gov/DECD/Content/About_DECD/Research-and-Publications/02_Review_Publications/Distressed-Municipalities.
[53] *See*, DEEP, "Environmental Justice Communities," available at https://portal.ct.gov/DEEP/Environmental-Justice/Environmental-Justice-Communities. *See also*, Conn. Gen. Stat. § 22a-20a(a)(1) (2020).
[54] Conn. Gen. Stat. § 22a-20a(a)(2) (2020).
[55] Conn. Gen. Stat. § 22a-20a(a)(2) (2020).

comments. For those 13 facilities the State has neither analyzed whether any of the facilities are located in an environmental justice community, nor considered amending the SIP to include permanent and enforceable emission limitations.

In the EJ context, another example of a source we are concerned about is the Wheelabrator Bridgeport facility located in Fairfield County. This facility is covered by the State's EJ program and requirements.[56] We are concerned that in addition to regional haze concerns, the facility is likely plaguing the surrounding EJ community with its emissions. [57]

The Regional Haze Rule lists four factors that states must consider when they select reasonable progress measures for sources: the costs of compliance, the time necessary for compliance, the energy and non-air quality environmental impacts of compliance, and the remaining useful life of any potentially affected sources.[58] Thus, the third factor directs states to consider the broader environmental implications of their regional haze plans, by requiring an analysis of the "non-air quality environmental impacts of compliance."[59]

Pursuant to this directive, Connecticut should analyze the environmental justice impacts of its second planning period haze SIP, which as proposed lacks consideration of environmental justice. Although the Regional Haze Rule does not define "non-air quality environmental impacts," the BART Guidelines (Guidelines), which inform a state's reasonable progress analysis, explain that the term should be interpreted broadly. Environmental justice impacts are the types of non-air quality impacts that Connecticut should consider and doing so is also consistent with the direction and authority provide by the State Legislature. Such considerations will not only lead to sound policy decisions but are also pragmatic as pointed out above, because most of the same sectors and sources implicated under the regional haze program are of concern to disproportionately impacted communities in Connecticut. Thus, considering the intersection of these issues and advancing regulations accordingly will help deliver necessary environmental improvements across issue areas, reduce uncertainty for the regulated community, increase the state's regulatory efficiency and result in more rational decision making.

Assessing environmental justice impacts would also be consistent with the Guideline's recognition that that non-air quality impacts are often highly localized and site-specific.[60] Environmental justice impacts, by their very nature, are highly localized and community-specific impacts. Analyzing the environmental justice impacts as part of a four-factor reasonable progress analysis is also consistent with the Guidelines' recognition that non-air quality impacts can be positive or negative. For example, a reasonable progress measure that reduces a source's impacts on a nearby low-income or minority community would result in a positive

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[56] Wheelabrator Bridgeport generates as much at 67 MW of power and is a major source. *See, e.g.*, Wheelabrator Bridgeport website, available at https://www.wtienergy.com/plant-locations/energy-from-waste/wheelabrator-bridgeport. *See also*, Wheelabrator Bridgeport Title V permit, available at https://portal.ct.gov/-/media/DEEP/air/permits/TitleV/Wheelabarator_Bridgeport/P0150219TVpdf.pdf.

[57] Moreover, the facility's Clean Air Act Title V operating permit has expired and there is no information on the State's website to indicate a timely application for renewal was submitted. Therefore, it is unclear whether the facility is operating under a valid Title V permit.

[58] 40 C.F.R. § 51.308(d)(1)(i)(A), (f)(2)(i).

[59] *See, e.g., id.* § 51.308(d)(1)(i)(A).

[60] *See id.* § (IV)(D)(4)(i)(2)–(3).

environmental justice impact, while a measure that would increase or prolong a source's impacts on a disproportionately burdened community would result in a negative environmental justice impact.

As a result, when Connecticut determines "the emissions reduction measures that are necessary to make reasonable progress," it should include its assessment how those measures will either reduce or exacerbate any environmental justice impacts on nearby disproportionately burdened communities.[61] For example, when Connecticut conducts a four-factor analysis for a source that is located near a low-income or minority community that suffers disproportionate environmental harms, it should analyze how each considered measure would either increase or reduce the environmental justice impacts to the community. Connecticut reasonable progress decision should be influenced by such environmental justice analysis. Incorporating environmental justice impacts into the reasonable progress analysis will further the goal of assessing the broader environmental implications of Connecticut's regional haze actions, and will help maximize the environmental benefits of the regional haze program.[62]

There are additional legal grounds for considering environmental justice when determining reasonable progress controls. Under the Clean Air Act, states are permitted to include in a SIP measures that are authorized by state law but go beyond the minimum requirements of federal law.[63] Moreover, the State can also consider environmental justice when developing its haze plan, regardless of whether the Clean Air Act's haze provisions require such consideration. Ultimately, EPA will review the haze plan that Connecticut submits, and EPA will be required to ensure that its action on Connecticut's haze plan addresses any disproportionate environmental impacts of the pollution that contributes to haze. In addition to existing Executive Orders that requires federal executive agencies such as EPA to "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations,"[64] on January 27, 2021, the current Administration signed "Executive Order on Tackling the Climate Crisis at Home and Abroad."[65] The new Executive Order on climate change and environmental justice provides that:

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[61] *See* 40 C.F.R. § 51.308(f)(2)(i).
[62] *See* 40 C.F.R. pt. 51, app. Y at § (IV)(D)(4)(i)(2).
[63] *See Union Elec. Co v. EPA*, 427 U.S. 246, 265 (1976) ("States may submit implementation plans more stringent than federal law requires and . . . the Administrator must approve such plans if they meet the minimum requirements of s 110(a)(2)."); *Ariz. Pub. Serv. Co. v. EPA*, 562 F.3d 1116, 1126 (10th Cir. 2009) (quoting *Union Elec. Co.*, 427 U.S. at 265) ("In sum, the key criterion in determining the adequacy of any plan is attainment and maintenance of the national air standards . . . 'States may submit implementation plans more stringent than federal law requires and [ ] the [EPA] must approve such plans if they meet the minimum [Clean Air Act] requirements of § 110(a)(2).'"); *BCCA Appeal Group v. EPA*, 355 F.3d 817, 826 n. 6 (5th Cir. 2003) ("Because the states can adopt more stringent air pollution control measures than federal law requires, the EPA is empowered to disapprove state plans only when they fall below the level of stringency required by federal law.").
[64] Exec. Order No. 12898, § 1-101, 59 Fed. Reg. 7629 (Feb. 16, 1994), as amended by Exec. Order No. 12948, 60 Fed. Reg. 6381 (Feb. 1, 1995).
[65] "Executive Order on Tackling the Climate Crisis at Home and Abroad," (Jan. 27, 2021) (Climate Change and EJ EO), available at https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/; *see also*, White House Fact Sheet, "President Biden Takes Executive Actions to Tackle the Climate Crisis at Home and Abroad, Create Jobs, and Restore Scientific Integrity

> It is the policy of [this] Administration to organize and deploy the full capacity of its agencies to combat the climate crisis to implement a Government-wide approach that reduces climate pollution in every sector of the economy; … protects public health … delivers environmental justice …[and that] … [s]uccessfully meeting these challenges will require the Federal Government to pursue such a coordinated approach from planning to implementation, coupled with substantive engagement by stakeholders, including State, local, and Tribal governments."[66]

Connecticut can facilitate EPA's compliance with these Executive Orders by considering environmental justice in its SIP submission.

Consistent with legal requirements and government efficiency, we urge Connecticut to take impacts to EJ communities, like the ones we have expressed for the Wheelabrator facility, into consideration as it evaluates all sources that impact regional haze.

VI. Conclusion

Due to the deficiencies in Connecticut's proposal, the state must revise and reissue a valid haze SIP for public notice and comment. We look forward to receiving notice of the State's revised SIP and reviewing and commenting on it. Please feel free to contact the undersigned should you have any questions regarding these comments.

Sincerely,

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Across Federal Government," (Jan. 27, 2021), available at https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/27/fact-sheet-president-biden-takes-executive-actions-to-tackle-the-climate-crisis-at-home-and-abroad-create-jobs-and-restore-scientific-integrity-across-federal-government/.

[66] Climate Change and EJ EO, § 201.

Enclosures

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