



December 1, 2021

Connecticut

Delaware

District of Columbia

Maine

Maryland

Massachusetts

New Hampshire

New Jersey

New York

Pennsylvania

Penobscot Indian Nation

Rhode Island

St. Regis Mohawk Tribe

Vermont

MANE-VU Class I Areas

Acadia National Park
Maine

Brigantine Wilderness
New Jersey

Great Gulf Wilderness
New Hampshire

Lye Brook Wilderness
Vermont

Moosehorn Wilderness
Maine

Presidential Range
Dry River Wilderness
New Hampshire

Roosevelt Campobello
International Park
Maine/New Brunswick,
Canada

Mark Reynolds

Tennessee Department of Environment and Conservation

Division of Air Pollution Control

William R. Snodgrass Tennessee Tower

312 Rosa L. Parks Avenue, 15th Floor

Nashville, TN 37243 [VIA Email](#)

RE: Tennessee Regional Haze State Implementation Plan, Pre-Hearing Draft, October 21, 2021

Dear Mr. Reynolds:

The Mid-Atlantic/Northeast Visibility Union (MANE-VU) appreciates the opportunity to comment on the Tennessee Department of Environment and Conservation's (TN DEC's) pre-hearing draft Regional Haze State Implementation Plan (SIP) for the second implementation period dated October 21, 2021 (hereinafter, the pre-hearing draft). The pre-hearing draft is of interest to MANE-VU because MANE-VU identified Tennessee emissions as significantly contributing to visibility impairment at Class I areas in the region. MANE-VU's comments below relate to meeting the MANE-VU Inter-RPO Ask. An additional comment follows the Inter-RPO Ask discussion.

MANE-VU Ask

Ask #1: EGUs \geq 25 MW with installed controls, ensure that controls are run year round.

Page 228 states "As stated in Section 7.2.2.1, all of the coal-fired EGU's in Tennessee have SO₂ and NO_x control devices, and these control devices are required to operate continuously." MANE-VU notes these efforts.

Ask #2: For emissions sources having a 3.0 Mm⁻¹ impact or greater at MANE-VU Class I areas, perform a four-factor analysis.

This Ask item is not applicable to Tennessee.

Ask #3: Adopt an ultra-low sulfur fuel oil standard

MANE-VU respectfully reaffirms its request that TN DEC adopt an ultra-low fuel oil standard as requested in the original MANE-VU Inter-RPO Ask and in

MANE-VU's letter to TN DEC dated February 17, 2021. Alternatively, TN DEC should document in its SIP why the adoption of such a standard is infeasible.

Ask #4: For EGUs and other large sources, pursue enforceable mechanisms to lock in lower emission rates.

MANE-VU notes the efforts of regulated sources in TN that have entered into enforceable consent agreements.

Ask #5: Encourage and promote energy efficiency and clean technologies

TN DEC stated in several places in its SIP that renewable energy contributed to significant reductions in SO₂ and NO_x emissions, but TN DEC did not specifically document what these efforts consist of. MANE-VU asks that TN DEC document in its Regional Haze SIP any measures or efforts they are considering for energy efficiency and clean technologies. Rather than a focus on energy markets, this would be a discussion within TN DEC's haze SIP of the energy efficiency measures and clean energy programs under consideration, or currently operating, in Tennessee. Unlike MANE-VU's other Ask items, MANE-VU does not necessarily intend that these measures be enforceable or included as part of a state's long-term strategy. But because such programs can reduce emissions and therefore benefit visibility, MANE-VU is asking its upwind state partners to consider and report such measures in their haze SIPs.

Additional Comment

Section 10.3, Consultation with MANE-VU, Technical Analysis – Inventories, Modeling, and Evaluation, pages 225-228

TN DEC stated that the MANE-VU states' analysis used emission inventories that are outdated and inconsistent with the recent EPA regional haze modeling platform, and that the inventories do not fully reflect emission reductions expected from southeastern EGUs. TN DEC also stated that MANE-VU states used the CALPUFF model and the Q/d screening approach to identify contributions that they allege are significant, and that CALPUFF should not be used for transport distances greater than 300 km because there are serious conceptual concerns with the use of puff dispersion models for very long-range transport that can result in overestimations of surface concentrations by a factor of three to four.

Here, MANE-VU would like to simply re-iterate the remarks that it made in Section I of MANE-VU's February 17, 2021 letter to TN DEC, specifically that MANE-VU used a weight of evidence approach, consistent with EPA guidance, to determine which states are reasonably anticipated to contribute to visibility impairment at MANE-VU Class I areas. In the February 17, 2021 letter, MANE-VU explained:

This approach is consistent with EPA's 2019 *Guidance on Regional Haze State Implementation Plans for the Second Implementation Period*, which states that “[a] variety of technical, quantitative approaches exist to assess which out-of-state Class I areas may be affected by aggregate emissions from a given state”; and “a state may use another reasonable approach (e.g., back trajectory-based approaches).”

Consistent with this guidance, MANE-VU used several technical, quantitative methodologies as screening tools to identify states that are reasonably anticipated to contribute to visibility impairment at MANE-VU Class I areas. To account for uncertainties that may exist with any one analysis method, MANE-VU did not rely solely on the absolute magnitude of the contribution predicted by any one method, but rather used the results of each method to develop a relative ranking of state impacts in determining which states are reasonably anticipated to contribute to visibility impairment at MANE-VU Class I areas.

Thank you for your efforts and your consideration of these comments. If you would like further clarification or discussion on any of these comments, please contact the MANE-VU Lead Manager Paul Miller (pmiller@nescaum.org) or the Chairs of the MANE-VU Technical Support Committee: Sharon Davis of the New Jersey Department of Environmental Protection (sharon.davis@dep.nj.gov) and David Healy of the New Hampshire Department of Environmental Services (david.s.healy@des.nh.gov).

Sincerely,

/s/Sharon Davis, New Jersey Department of Environmental Protection
/s/David Healy, New Hampshire Department of Environmental Services
Co-Chairs, MANE-VU Technical Support Committee