

February 17, 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

Michelle W. Owenby, Director
Division of Air Pollution Control
State of Tennessee Department of Environment and Conservation
William R. Snodgrass Tennessee Tower, 15th Floor
312 Rosa L. Parks Avenue
Nashville, TN 37243 [VIA Email](#)

*RE: Letter from TDEC-APC to Paul Miller, MANE-VU Lead Manager, dated
January 13, 2021*

Dear Ms. Owenby:

Thank you for your January 13, 2021 letter regarding the MANE-VU Inter-RPO Ask. Such proactive communication ensures that states and other jurisdictions are working together towards the common goals of restoring natural visibility conditions at Class I areas and the timely submittal of approvable regional haze SIPs. In response to your letter, MANE-VU would like to reaffirm the merits of its technical analysis and maintain its request that the identified contributing upwind states should pursue the measures as outlined in MANE-VU's Inter-RPO Ask.

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

I. MANE-VU Technical Analysis

As pointed out in your letter, MANE-VU used a weight of evidence approach in its analysis to determine which states are reasonably anticipated to contribute to visibility impairment at MANE-VU Class I areas. 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.

II. MANE-VU Inter-RPO Ask

MANE-VU continues to request that states identified by the MANE-VU technical analyses as being reasonably anticipated to contribute to visibility impairment at MANE-VU Class I areas pursue the measures in the MANE-VU Inter-RPO Ask. Upon reading and evaluating your January 13 letter, MANE-VU respectfully submits the following observations as to how the individual Ask elements could be addressed in Tennessee's regional haze SIP submittal:

1. *Electric Generating Units (EGUs) with a nameplate capacity larger than or equal to 25MW with already-installed NO_x and/or SO₂ 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 emissions reductions.*

At the top of page 2 of your letter, you explain the emissions reductions that have occurred at EGUs in Tennessee (particularly at TVA facilities) since the time of MANE-VU's chosen emissions analysis years of 2011/2015. MANE-VU recognizes the efforts by Tennessee and its regulated sources to reduce emissions of SO₂ and NO_x. MANE-VU respectfully requests that these emissions reductions be explicitly documented in Tennessee's regional haze SIP with specific consideration for whether and how these emissions reductions meet the MANE-VU Inter-RPO Ask.

2. *Emission sources modeled by MANE-VU that have the potential for visibility impacts of 3 Mm⁻¹ or greater at any MANE-VU Class I area, as identified by MANE-VU contribution analyses - perform a four-factor analysis for reasonable installation of or upgrade to emissions controls.*

There are no such emission sources in Tennessee.

3. *States should pursue an ultra-low sulfur fuel oil standard similar to the one adopted by MANE-VU states in 2007 as expeditiously as possible and before 2028, depending on supply availability, where the standards are as follows:*
 - a. *distillate oil to 0.0015% sulfur by weight (15 ppm),*
 - b. *#4 residual oil to 0.5% sulfur by weight,*
 - c. *#6 residual oil to 0.5% sulfur by weight.*

MANE-VU respectfully asks Tennessee to consider pursuing such fuel standards as enforceable SIP measures, or to include in its SIP a description of why supply availability makes the adoption of such standards infeasible. Please note that 15 ppm distillate oil is essentially highway diesel and widely available.

4. *EGUs and other point emission sources larger than 250 MMBTU per hour heat input that have switched operations to lower emitting fuels - pursue updating permits, enforceable agreements, and/or rules to lock-in lower emission rates for SO₂, NO_x, and PM. The permit, enforceable agreement, or rule can allow for suspension of the lower emission rate during natural gas curtailment.*

MANE-VU recognizes the efforts by Tennessee and these regulated sources to reduce emissions of SO₂ and NO_x. To meet Ask Item 4, MANE-VU respectfully asks that the emission reductions described in your January 13 letter be documented in Tennessee's regional haze SIP as permanent and enforceable.

5. *In their SIP, each state should consider and report measures or programs to: a) decrease energy demand through the use of energy efficiency, and b) increase the use within their state of Combined Heat and Power (CHP) and other clean Distributed Generation technologies including fuel cells, wind, and solar.*

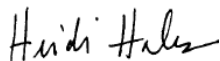
MANE-VU simply asks that Tennessee document in its regional haze SIP any measures or efforts that it is considering in these areas.

III. Conclusion

MANE-VU thanks you for your correspondence regarding MANE-VU's technical analyses and the MANE-VU Inter-RPO Ask. MANE-VU respectfully maintains that its technical analyses, although different from those of Tennessee and VISTAS, are credible, defensible, and consistent with the Regional Haze Rule and EPA guidance. MANE-VU recognizes that regardless of any analysis methods or outcomes, the final decisions of which emission control measures to pursue or adopt rest with the states. MANE-VU intends to review for potential comment on any contributing state's regional haze SIP proposal with respect to how it addresses the MANE-VU Inter-RPO Ask.

If you have any questions on the contents of this response, please contact Sharon Davis (sharon.davis@dep.nj.gov) or David Healy (david.s.healy@des.nh.gov), the co-chairs of the MANE-VU Technical Support Committee.

Sincerely,



Heidi Hales
MANE-VU Chair's Representative
Director, Air Quality and Climate Division
Vermont Department of Environmental Conservation

cc: MANE-VU members