

**ATTACHMENT F**

**Comments from VISTAS and  
West Virginia Department of Environmental Protection**

Attachment F

- VISTAS Comments MANE-VU Best and Final Modeling
- West Virginia Comments MANE-VU 2018 Visibility Projections Draft Report



VISIBILITY IMPROVEMENT –  
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April 25, 2008

Anna Garcia  
Executive Director  
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RE: VISTAS Comments  
MANE-VU Best and Final Modeling

Dear Anna,

The states involved in the VISTAS regional haze planning organization appreciate the opportunity to provide the following comments to the MANE-VU states regarding the recent MANE-VU Best and Final modeling effort which evaluated visibility benefits in 2018 of possible future emissions control strategies. The MANE-VU Best and Final strategy appears to include controls in the VISTAS region, and perhaps elsewhere, for which no enforceable requirements are in place to implement the projected controls. The modeling effort utilized information that is inconsistent with what was provided to MANE-VU during interstate consultation with the VISTAS states. MANE-VU used emission control strategies and levels for the VISTAS states that are different from those used in the VISTAS assessment and included in the State Implementation Plans (SIPs) by the VISTAS states.

For Electric Generating Units, VISTAS states began with the 2018 emissions controls projected by the Integrated Planning Model (IPM) version 2.1.9 and adjusted these projections to reflect known controls on specific units. VISTAS states consulted with their utilities to adjust IPM projections for 2018. This included additional controls on EGUs in Georgia and North Carolina for which state regulations are in place that require specific controls to be installed by 2018. It also included controls on EGUs in Alabama, Kentucky, Virginia, and West Virginia consistent with requirements of federal consent decrees. Florida, South Carolina, and Virginia added back into the inventory emissions from oil-fired boilers that IPM assumed would be shut down by 2018 but utilities indicated would not be shut down. In contrast, MANE-VU added SO<sub>2</sub> emissions back into the 2018 eastern RPO inventory because as modeled for VISTAS, total SO<sub>2</sub> emissions in the areas of the MRPO, MANE-VU and VISTAS were below the CAIR caps and MANE-VU states do not believe that that is realistic. VISTAS states are confident of controls that will be installed in the Southeast by 2009 and are relying on state regulations as well as utility and IPM projections for 2018.

These MANE-VU assumptions provide an alternative worst case estimate of 2018 emissions that does not use the specific evaluation completed by the VISTAS states and used in the VISTAS states' SIPs. VISTAS states have documented the basis for the assumptions

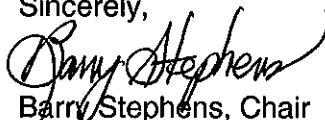
used in their SIPs and will re-evaluate progress in 2012 to determine if adjustments to these assumptions are needed.

MANE-VU states determined that reducing sulfur in fuel oil for residential, commercial, and industrial users and implementing BART controls could reduce SO<sub>2</sub> emissions from non-EGU sources in MANE-VU states by more than 28%. MANE-VU therefore asked VISTAS and MRPO to reduce SO<sub>2</sub> emissions from non-EGU by 28% and subsequently reduced the VISTAS and MRPO non-EGU 2018 SO<sub>2</sub> inventory by that percentage in the MANE-VU Best and Final modeling. Fuel oil contributes 15-37% to SO<sub>2</sub> in areas of influence for MANE-VU Class I areas, but in the VISTAS states, fuel oil contributions are less than 10% of the SO<sub>2</sub> emissions in the areas of influence for the VISTAS Class I areas. The VISTAS SO<sub>2</sub> contribution assessment for the VISTAS Class I areas demonstrated that the major sources of SO<sub>2</sub> in the VISTAS areas of influence are EGUs and coal-fired industrial boilers. To achieve a 28% reduction in non-EGU emissions in the VISTAS states, MANE-VU assumed that a 50-60% SO<sub>2</sub> reduction would be achieved for emissions from industrial boilers in the VISTAS states. These assumptions do not appear to take into account cost analyses conducted by VISTAS states as part of the evaluation of the four statutory factors for contributing sources in the areas of influence for VISTAS Class I areas. While most VISTAS states determined that there were no cost-effective controls for sources contributing to Class I areas in the VISTAS states, some VISTAS states are still completing their determinations. The ultimate collective conclusions of the VISTAS states will also apply for more distant Class I areas such as those in the MANE-VU region.

In summary, the MANE-VU Best and Final modeling has evaluated benefits of potential control strategies that do not reflect the emissions inventories provided to MANE-VU for the VISTAS states. Therefore the VISTAS states recommend that the MANE-VU states use the VISTAS inventories rather than the MANE-VU Best and Final inventory in their SIPs. States are given the authority to define reasonable measures for sources within their respective boundaries. Through the SIP approval process, EPA will determine if control assumptions included in VISTAS states' SIPs are appropriate to demonstrate reasonable progress toward visibility improvement. The VISTAS states believe that the MANE-VU state SIPs will be most readily approvable by EPA if the VISTAS inventories are used.

Thank you for your consideration. If you have questions, please direct them to John Hornback, executive director of SESARM, at 404-361-4000 or hornback@metro4-sesarm.org.

Sincerely,



Barry Stephens, Chair  
VISTAS State and Tribal Air Directors

CC: John Hornback

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April 25, 2008

Ms. Angela King  
MANE-VU c/o  
MARAMA  
via e-mail

RE: West Virginia Comments on the  
MANE-VU 2018 Visibility Projections  
Draft Report

Dear Ms. King:

The West Virginia Department of Environmental Protection, Division of Air Quality (DAQ) appreciates the opportunity to comment on the Mid-Atlantic/Northeast Visibility Union (MANE-VU) 2018 Visibility Projections Draft Report. These comments are being submitted via e-mail to the Mid-Atlantic Regional Air Management Association (MARAMA), which is assisting MANE-VU.

West Virginia is a member of the Visibility Improvement - State and Tribal Association of the Southeast (VISTAS) regional planning organization and concurs with the comments submitted by Barry Stephens, Chair of the VISTAS State and Tribal Air Directors, on behalf of the VISTAS members. VISTAS has expended a tremendous amount of resources to assist member states in developing their Regional Haze State Implementation Plans (SIPs) and has consistently delivered high-quality technical analyses. We strongly believe that the sophisticated professional work completed by VISTAS provides a more than adequate technical basis on which members can build their SIPs. Indeed, EPA and the Federal Land Managers have universally praised the VISTAS work products and initial SIPs for their technical accuracy and comprehensiveness. In addition to the VISTAS comments, DAQ would like to provide supplemental comments.

We would like to emphasize that we expressly notified several MANE-VU states at the start of the public comment period for our proposed Regional Haze SIP in October 2007. Further, though not required, the DAQ at that time provided electronic copies of the full SIP documentation, including the emission inventories developed by VISTAS, to the following MANE-VU states: Maryland, New Hampshire, New Jersey, Vermont, and Pennsylvania.

Although DAQ did receive several substantive comments from New Jersey on other matters, no comments received from New Jersey, or any other MANE-VU state, raised any issue regarding the emissions inventories used in the SIP modeling. Given subsequent developments, the DAQ believes that some of the potential commenters knew, or should have known, that significantly different emissions inventories were in process for MANE-VU's visibility evaluations. The emissions are clearly the fundamental basis for any such evaluations and should be one of the first elements examined upon review because the projected emission changes establish the expected rate of progress. Yet no one, including potential MANE-VU commenters, raised this issue during the formal comment period for our proposed Regional Haze SIP, despite proactive outreach efforts. Given the impact on evaluations for Class I areas such as Brigantine (NJ), Shenandoah (VA) and Dolly Sods (WV), the DAQ believes that it is inappropriate to arbitrarily revise the projected emissions inventory for a regulatory analysis. We believe that the approach taken by VISTAS is more suitable and supportable.

For electric generating units (EGUs), VISTAS states began with the 2018 emission controls projected by the Integrated Planning Model (IPM) version 2.1.9 and adjusted the projections to reflect known controls on specific units. West Virginia recommended that the IPM projections be used for our EGUs in 2018, since we did not have any more reliable information available to justify changes. West Virginia did, however, make adjustments to the 2009 IPM projections to remove controls that we knew were not scheduled for installation by that date. Ignoring the careful application of local knowledge, MANE-VU has inappropriately increased the SO<sub>2</sub> emissions of W.Va.'s EGU sources by 20%, without regard for existing/scheduled controls, and without consulting the DAQ.

MANE-VU also determined that their member states could achieve a 28% reduction in non-EGU SO<sub>2</sub> emissions by reducing sulfur in fuel oil. Therefore, MANE-VU asked VISTAS and the Mid-West Regional Planning Organization (MRPO) to reduce SO<sub>2</sub> emissions from their non-EGUs by 28%. DAQ evaluated potential controls for non-EGUs in our state and determined that there were no equivalent reasonably available controls. However, the W.Va. EGUs achieve excess emission reductions which more than offset the MANE-VU fuel oil "ask." DAQ documented this result in our proposed Regional Haze SIP as provided to the MANE-VU states identified above. MANE-VU, however, then assumed a 50-60% decrease in SO<sub>2</sub> emissions from industrial boilers in the VISTAS states, including W.Va. This reduction is neither realistic nor enforceable and was modeled without consulting DAQ.

The Regional Haze Rule gives states the authority to define reasonable measures for sources within their respective borders and the VISTAS states, including W.Va., provided MANE-VU with the projected 2018 VISTAS emission inventory during the interstate consultation process. MANE-VU chose not to accept the VISTAS inventory and instead evaluated the benefits of potential control strategies that do not reflect the information provided by the VISTAS states.

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DAQ believes that MANE-VU has significantly changed emission control assumptions subsequent to the formal RPO consultation meeting, without a sound basis. West Virginia strongly recommends that the MANE-VU states use the VISTAS inventories supplied to them for our states, rather than the inventory that MANE-VU has adopted. DAQ notes that EPA will ultimately determine what control assumptions are appropriate for use in SIPs to demonstrate reasonable progress toward visibility improvement. DAQ believes that the MANE-VU state SIPs are more likely to be federally approvable if the VISTAS inventories are used.

Sincerely,



William Frederick Durham  
Deputy Director  
Assistant Director, Planning  
Division of Air Quality