



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1
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BOSTON, MA 02114-2023

October 24, 2008

Jeff Underhill
Air Resources Division
New Hampshire Department of Environmental Services
29 Hazen Drive, PO Box 95
Concord, NH 03302-0095

Dear Mr. Underhill:

Previously, EPA received a preliminary draft of New Hampshire's Regional Haze State Implementation Plan (SIP). EPA provided written comments on the preliminary draft to New Hampshire in a letter dated July 10, 2008.

Subsequently, we received a revised version of New Hampshire's draft Regional Haze SIP. We have reviewed the revised draft and found that New Hampshire has adequately addressed most, but not all, of our previous comments. You will find our comments on the revised draft in the Enclosure.

If you have any questions on these comments, please contact Anne McWilliams of my staff at 617-918-1697.

Sincerely,

A handwritten signature in cursive script that reads "Anne Arnold".

Anne Arnold, Manager
Air Quality Planning Unit

Enclosure

Enclosure

EPA Comments on New Hampshire's Draft Regional Haze SIP (7/18/08)

BART Determinations

As mentioned on page 81, 40 CFR 51.308(e)(1)(A) states "The determination of BART (Best Available Retrofit Technology) must be based on an analysis of the best system of continuous emission control technology available and associated emission reductions achievable for each BART-eligible source that is subject to BART within the State. In this analysis, the State must take into consideration the technology available, the cost of compliance, the energy and non-air quality environmental impacts of compliance, any pollution control equipment in use at the source, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology."

Although NHDES referenced the MANE-VU five factor analysis of BART-eligible sources for available control options and general analysis of the required factors, additional detail is needed specific to the New Hampshire BART sources, particularly in the areas of expected visibility improvement and cost of compliance. This is especially important in the case where NHDES is proposing a level of control less stringent than that recommended by the MANE-VU BART workgroup.

Merrimack Station:

SO₂

Under the "Available Retrofit Technologies for SO₂ Control," New Hampshire discusses control via a wet flue gas desulphurization (FDG or "scrubber") system. This discussion indicates that FGD "can be designed to remove greater than 95 percent of incoming SO₂." Therefore, NHDES should explain why New Hampshire is proposing a final control level of only 90%.

Page 82, Footnote 17 – This footnote indicates that the New Hampshire Clean Powers Act requires an 80% control level from the FGD. It further indicates that once the unit demonstrates a sustainable control level greater than 80%, the requirement is raised to that higher level. NHDES should expand on what is considered demonstrating a sustainable control level and the anticipated timeframe for achieving this higher level of control.

PM₁₀

The Appendix X discussion of the current control level in respect to PM₁₀ for the Merrimack unit lists the current control as electrostatic precipitators (ESP)s with a control level of 85%. On page 84, Table 9.4, "PM₁₀ Emission Reductions Resulting from Application of BART Controls," lists the current control as 97% control. NHDES should

clarify whether 85% or 97% is the current level of control, and clearly state what level of control has been determined to represent BART.

Newington Station:

SO₂

Newington Station is one of the 167 stacks which impacts a Class 1 area as well as a BART source. FGD would be expected to reduce SO₂ emissions by 95%, while New Hampshire's proposal to require 1% sulfur fuel would only achieve a 50% reduction. In addition, the MANE-VU "ask" includes 0.5% sulfur fuel for the 167 stacks and 0.3% sulfur fuel has been recommended as BART by the MANE-VU BART workgroup. Therefore, it is not clear why New Hampshire has determined that a less stringent requirement of 1% sulfur fuel represents BART for this source. NHDES should include an analysis of the feasibility of implementing these other control strategies at Newington, as well as a discussion of the visibility impacts of various strategies, especially if NHDES determines that an option less stringent than the MANE-VU recommendations is BART.

PM₁₀

Appendix X indicates that Newington currently has a permitted daily cap of 0.22 lb/MMBtu and currently operates an ESP. Table 9.4, "PM₁₀ Emission Reductions Resulting from Application of BART controls," lists the current level of control (which is proposed as BART) to be 56%. The MANE-VU BART workgroup recommendation for non-CAIR EGUs, however, is 0.02 – 0.04 lb/MMBtu. Also, as stated in the available retrofit technologies for PM₁₀ control, rebuilt ESPs can achieve collection efficiencies of more than 99%. Therefore, it is not clear why New Hampshire has determined that current controls, which are less stringent than the MANE-VU recommendation, are sufficient for BART. NHDES should examine (and document) other options before concluding that current controls are BART.

Enforceability

Table 9.3 and 9.4 indicate that, for NO_x and PM, respectively, "current controls (ESP, SCR, etc.) are BART." It should be noted that BART requirements must be federally enforceable. Therefore, the BART discussion should reference the specific existing federally enforceable requirements that require these "current controls." Alternatively, if the requirements implementing the current controls are not yet federally enforceable, they must be submitted to EPA as a SIP revision.

Section 9.4.2 Bart-Eligible EGUs and the role of CAIR

Massachusetts is classified as a seasonal CAIR state and should not be included in the list of Non-CAIR states.

Section 3.2.2.2 Meeting the “Ask” – New Hampshire

Merrimack Station and Newington Station have both been identified as BART sources and as two of the top 167 stacks contributing to visibility impairment in a MANE-VU Class I area. The MANE-VU “Ask” requests that the 167 stacks be controlled to the 90% level. This section of New Hampshire’s SIP states that NHDES has determined that 90% control is not reasonable for the Newington station at this time but that NHDES anticipates that controls installed at the Merrimack station will result in over-compliance, thereby partially offsetting the lesser control at Newington. According to the BART determination, however, Merrimack station is only expected to be controlled at the 90% level. NHDES should explain why 90% control of SO₂ at Newington is not reasonable and why BART for SO₂ at Merrimack station is set at 90% if the level of control is expected to be greater than 90%.

Section 11.9 New Hampshire’s Share of Emission Reductions

In discussing New Hampshire’s obligation to meet its share of emission reductions, NHDES references:

“Emission controls on targeted in-state EGUs that contribute to visibility impairment at Class I area in the region – more specifically, compliance with New Hampshire law RSA 125-O, Multiple Pollutant reduction Program, which mandates the installation of scrubbers on PSNH Merrimack Station Units 1 and 2 by July 1, 2013, to control SO₂ and mercury emissions; these controls will reduce SO₂ emissions by a minimum of 80% from 2002 levels;”

In the “meeting the ask” section, the control level of Merrimack station is stated to be in excess of 90%, while in the BART discussion it is expected to be 90%, and the discussion above references 80%. NHDES should clarify what level of SO₂ control will be required and what mechanism is going to be used to make the SO₂ control federally enforceable.

In addition, this section discusses a low sulfur fuel strategy. What mechanism is New Hampshire planning to use to make the low sulfur fuel strategy federally enforceable?