



The State of New Hampshire  
**DEPARTMENT OF ENVIRONMENTAL SERVICES**



Thomas S. Burack, Commissioner

March 23, 2016

Mr. Leiran Biton  
USEPA Region 1 – New England  
5 Post Office Square, Suite 100  
Mail Code OEP05-02  
Boston, MA 02109-3912

**Re: Response to Order – Title V Petition VI-2014-04  
Public Service Company of New Hampshire d/b/a Eversource Energy  
Schiller Station, Portsmouth, NH**

Dear Mr. Biton:

Enclosed, please find New Hampshire Department of Environmental Services' ("NHDES") modeling protocol for modeling 1-hour SO<sub>2</sub> concentrations in and around the seacoast region of New Hampshire. This protocol was submitted to NHDES by Public Service Company of New Hampshire d/b/a Eversource Energy ("Eversource") and was prepared in close consultation with NHDES staff. It describes the procedures that will be used in modeling to support the Order on Title V Petition VI-2014-04 regarding the issuance of Proposed Title V Operating Permit TV-0053 for the Eversource Schiller Station in Portsmouth. This modeling will also be used to characterize 1-hour sulfur dioxide (SO<sub>2</sub>) concentrations in the vicinity of Schiller Station as part of NHDES's obligations under the 2010 1-hour NAAQS SO<sub>2</sub> Data Requirements Rule ("DRR"). This protocol was written to simultaneously address the specific modeling requirements for the Title V process and the DRR.

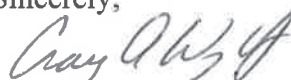
In the enclosed protocol, NHDES has proposed the use of the beta adjusted surface friction velocity modeling technique. Per EPA's December 10, 2015 memorandum<sup>1</sup>, the application of this beta option requires formal approval and is subject to the requirements of the current 2005 version of the Guideline on Air Quality Models (Appendix W of 40 CFR Part 51). NHDES has submitted an analysis and justification for the use of this beta option to you under separate cover dated March 18, 2016.

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<sup>1</sup> "Clarification on the Approval Process for Regulatory Application of the AERMOD Modeling System Beta Options" ([https://www3.epa.gov/ttn/scram/guidance/clarification/AERMOD\\_Beta\\_Options\\_Memo-20151210.pdf](https://www3.epa.gov/ttn/scram/guidance/clarification/AERMOD_Beta_Options_Memo-20151210.pdf))

Please note that this protocol outlines the procedures that will be used to perform the modeling. Specific model inputs and data processing discussed in the protocol (including meteorological data, modeled background sources, and monitored background concentrations) are still subject to review by NHDES. If you have any questions, please contact David Healy of my staff at (603) 271-0871 or [david.healy@des.nh.gov](mailto:david.healy@des.nh.gov).

Sincerely,



Craig A. Wright  
Director  
Air Resources Division

Attachment:

Technical Memorandum, Air Quality Modeling Protocol for Schiller Station, March 21, 2016

cc: David Conroy, EPA Region 1  
Ida McDonnell, EPA Region 1  
Sheila Burke, Eversource  
Lloyd Schulman, Exponent  
Zachary Fabish, Sierra Club