



# A facsimile from

**To: Rocco Sgarro**  
Fax number: 570-802-8119

**U.S Nuclear Regulatory  
Commission**  
Michael Canova  
301-415-0737

**Date 3/19/2009**

## **Regarding: Meteorology Audit Information Needs**

**As our lead safety reviewer for this activity will not be available, an additional audit for meteorology will be necessary at a later date (not established yet).**

**The attached sheet provides comments by that reviewer indicating the impact on data collection efforts during the environmental audit, including which items need not be supported at this time.**

**This information was described in our telcon of 4/20.**

**Please use this information to assess the level of support you will be providing the week of 4/27/09**

**Mike Canova  
Project Manager  
Office of New Reactors  
U.S. NRC**

**BELL BEND NUCLEAR POWER PLANT SITE AUDIT – ADDITIONAL INFO NEEDS**  
(Page 1 of 2)

**Info Needs Category – Meteorology and Air Quality (Met)** - Applies to Bell Bend Nuclear Power Plant (BBNPP) Combined License Application (COLA) Part 3, Environmental Report (ER) Section 6.4 and Final Safety Analysis Report (FSAR) Section 2.3.3

- Provide a general tour of the site and surrounding area, including:
  - the existing onsite primary meteorological tower site and shelter for Susquehanna Steam Electric Station (SSES) Units 1 and 2,
  - the existing (planned) meteorological tower site and shelter for the BBNPP,
  - the existing backup and supplemental (downriver) meteorological tower sites and shelters, and
  - the onsite and immediate offsite vicinity (to observe potential obstructions to airflow with respect to each tower)
  
- Make available for audit site plan(s)/map(s) corresponding to the information in Tables 6.4-2, 6.4-4, and 6.4-5, that show, by sector, the distance between the meteorological tower sites and:
  - existing obstructions to airflow (including SSES buildings, cooling towers, paved or improved surfaces, terrain features, trees and other vegetation), and
  - planned obstructions to airflow (including BBNPP buildings, cooling towers, paved or improved surfaces),
  
- Provide subject matter expert(s) knowledgeable in and/or responsible for routine operation, maintenance, and calibration of the SSES Units 1 and 2 meteorological tower instrumentation, and data acquisition and recording equipment
  
- If possible, provide access to the Standard Operating Procedures, related records and documentation regarding routine operation, maintenance, and calibration, data processing, validation, reporting and archival, and problem reports and corrective action for the meteorological monitoring program covering the period of record (POR) used in the COLA (i.e., 2001 thru 2007). If external coordination is necessary on the NRC's part with the operating Unit, provide a contact point for such coordination.
  
- Make available for audit a table listing percent data recovery and data counts for each year and the composite POR for individual parameters; the joint recovery of wind speed and wind direction (for each wind measurement level), and the joint recovery of wind speed, wind direction, and atmospheric stability class (for each wind measurement level)
  
- Make available for audit a table that identifies the number of hours (by year and parameter), if any, of data substitution to supplement data recovery, and a description of the alternate sources of meteorological data used

**Comment [MDM1]:** Common need for tour during Enviro and later Safety audits.

**Comment [MDM2]:** Common info need for Enviro and later Safety audits. However, Safety will look at earlier Enviro audit results.

**Comment [MDM3]:** Only cursory review during Enviro audit. Usually comes from discussion with site technician(s). More detailed review during later Safety audit.

**Comment [MDM4]:** Only cursory review during Enviro audit. Limited to records in tower shelter during tour. Safety will look at earlier Enviro audit results. However, more detailed review of SOPs during later Safety audit.

**Comment [MDM5]:** OK if not available for Enviro audit but will be covered during later Safety audit.

**Comment [MDM6]:** OK if not available for Enviro audit but will be covered during later Safety audit.

**Info Needs Category – Meteorology and Air Quality (Met)** - Applies to ER Section 2.7.6 and/or FSAR Sections 2.3.4 and 2.3.5. Provide the following:

**BELL BEND NUCLEAR POWER PLANT SITE AUDIT – ADDITIONAL INFO NEEDS**  
(Page 2 of 2)

- Make available for audit hard copies of AEOLUS3 dispersion model user's manual, verification and validation reports (if available), and other related documentation
- Provide an overview and presentation (e.g., PowerPoint) of AEOLUS3 dispersion model (input and output file structure, methodologies)
- Provide a subject matter expert and related figures to confirm the orientation of discharge from the vent stack for routine releases at Bell Bend and whether a rain cap or other flow obstruction is incorporated in the design such that it would hinder momentum rise of the exhaust gas
- Provide a subject matter expert to explain why the onsite meteorological data used in the dispersion analyses is considered representative of the region. The subject matter expert should be prepared to explain the significant variation in topography over a 50-mile radius area around the site and the differences in wind roses for the Bell Bend site, Wilkes-Barre/Scranton, Williamsport and Allentown
- Make available for audit a copy of analytical report(s) or other documentation that explains how site-specific recirculation correction factors (RCFs) were developed. Also, provide a subject matter expert to confirm whether RCF values (distances and sector locations) are relative to SSES Units 1&2 or BBNPP, and, if the latter, how those locations were translated so they were relative to BBNPP
- Make available for audit a copy of land use survey for special receptors (e.g., site boundary, nearest residents, gardens, milk and meat animals). Also, provide a subject matter expert to confirm whether receptor distances and compass sectors contained in Table 2.3-154 (AEOLUS3 Input) in the FSAR are relative to SSES Units 1&2 or BBNPP, and if the latter, how those locations were translated so they were relative to BBNPP

**Comment [MDM7]:** Common info need for Enviro and later Safety audits. However, Safety will look at earlier Enviro audit results.

**Comment [MDM8]:** Info needed for Enviro audit. Not necessary for later Safety audit.

**Comment [MDM9]:** Common info need for Enviro and later Safety audits. However, Safety will look at earlier Enviro audit results. Safety may also identify additional model-related info needs prior to later audit.

**Comment [MDM10]:** Common info need for Enviro and later Safety audits. However, Safety will look at earlier Enviro audit results.

**Comment [MDM11]:** Common info need for Enviro and later Safety audits. However, Safety will look at earlier Enviro audit results.

**Comment [MDM12]:** Common info need for Enviro and later Safety audits. However, Safety will look at earlier Enviro audit results.

MODE = MEMORY TRANSMISSION

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END=APR-23 02:08

FILE NO.=441

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	<p><b>A facsimile from</b></p> <p><b>U.S Nuclear Regulatory Commission</b></p> <p>Michael Canova 301-415-0737</p>
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<p><b>Date 3/19/2009</b></p>	
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