

October 20, 2006

Mr. Britt T. McKinney  
Sr. Vice President  
and Chief Nuclear Officer  
PPL Susquehanna, LLC  
769 Salem Blvd., NUCSB3  
Berwick, PA 18603-0467

SUBJECT: NRC RECEIPT OF SUSQUEHANNA STEAM ELECTRIC STATION, UNIT NOS. 1 AND 2 (SSES 1 AND 2) RESPONSE TO GENERIC LETTER 2003-01, "CONTROL ROOM HABITABILITY" (TAC NOS. MB9863 AND MB9864)

Dear Mr. McKinney:

The Nuclear Regulatory Commission (NRC) acknowledges the receipt of your responses to Generic Letter (GL) 2003-01, "Control Room Habitability," dated August 11, 2003 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML032310442), February 3, 2004 (ML040760752), February 11, 2005 (ML050530188), and June 28, 2005 (ML051890066). This letter provides a status of your response and describes any additional information that may be necessary to consider your response to GL 2003-01 complete.

The GL requested that you confirm that your control rooms meet their design bases (e.g., General Design Criterion (GDC) 1, 3, 4, 5, & 19, draft GDC, or principal design criteria), with special attention to: (1) determination of the most limiting unfiltered and/or filtered leakage into the control room and comparison to values used in your design bases for meeting control room operator dose limits from accidents (GL 2003-01, item 1a); (2) determination that the most limiting unfiltered leakage is incorporated into your hazardous chemical assessments (GL 2003-01, Item 1b); and, (3) determination that reactor control capability is maintained in the control room or at the alternate shutdown location in the event of smoke (GL 2003-01, Item 1b). The GL further requested information on any compensatory measures in use to demonstrate control room habitability, and plans to retire them (GL 2003-01, Item 2).

You reported the results of ASTM E741 (American Society for Testing Materials, Standard Test Method for Determining Air Change in a Single Zone by Means of a Tracer Gas Dilution) tracer gas tests for the SSES 1 and 2 control room which is pressurized for accident mitigation.

You determined that the tested value for leakage into the Control Room Envelope (CRE), was 150 (+/- 235) standard cubic-feet per minute (scfm) for "A" Division, and 129 (+/- 298) scfm for "B" Division which is more than the value of 10 cfm assumed in the design basis radiological dose analyses for Control Room Habitability (CRH). On October 13, 2005, you submitted a license amendment request (LAR) to incorporate alternative source term (AST) methodology into your licensing basis which would raise the design bases unfiltered leakage from 10 cfm to 510 cfm.

You indicated that normal CRH systems are assumed to operate during postulated hazardous chemical release events (i.e., untreated pressurization flow is used) and the control CRE remain habitable. Therefore, unfiltered leakage is not relevant for hazardous chemical

assessment. You also indicated that reactor control capability is maintained from either the control room or the alternate shutdown panel in the event of smoke.

The GL further requested that you assess your Technical Specifications (TSs) to determine if they verify the integrity of the CRE, including ongoing verification of the inleakage assumed in the design basis analysis for CRH, and in light of the demonstrated inadequacy of a delta ( $\Delta$ ) P measurement to alone provide such verification (GL 2003-01, Item 1c). As permitted by the GL, you provided a schedule for revising the surveillance requirement in the TSs to reference an acceptable surveillance methodology. In your June 28, 2005, response you indicated that you would submit a TS change request that will implement TS Task Force (TSTF) 448 following NRC approval.

In your response to Item 2 of GL 2003-01, you stated that no compensatory measures are needed to be in place to demonstrate control room habitability. However, the NRC staff noted that you relied on AST methodology to demonstrate control room operability which is considered a compensatory measure. As noted above, you have now submitted an LAR to revise your design basis radiological dose analysis using the AST methodology which will retire your compensatory measure.

The information you provided supported the conclusion that your are committed to meet the GDC regarding CRH.

Your commitment to submit an LAR based on TSTF-448, following our formal review and approval, is acceptable for purposes of closing out your response to GL 2003-01. The NRC staff will monitor submission of the LAR and interact with you as necessary during the amendment process.

If you have any questions regarding this correspondence, please contact me.

Sincerely,

**/RA/**

Richard V. Guzman, Project Manager  
Plant Licensing Branch I-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-387 and 50-388

cc: See next page

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