

December 4, 2006

Mr. Karl Singer
Chief Nuclear Officer and
Executive Vice President
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: WATTS BAR NUCLEAR PLANT, UNIT 1 – NRC RECEIPT OF RESPONSE TO
GENERIC LETTER 2003-01, “CONTROL ROOM HABITABILITY”
(TAC NO. MB9872)

Dear Mr. Singer:

The Nuclear Regulatory Commission (NRC) acknowledges the receipt of your responses to Generic Letter (GL) 2003-01, “Control Room Habitability,” dated August 8, 2003 (ML032230507 [Agencywide Documents Access and Management System Accession Number]) and August 4, 2004 (ML042230173). This letter provides the status of your response and describes any additional information that may be necessary to consider your response to GL 2003-01 complete.

GL 2003-01 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 inleakage into the control room and comparison to values used in your design bases for meeting control room operator dose limits from accidents (Item 1(a)); (2) Determination that the most limiting unfiltered inleakage is incorporated into your hazardous chemical assessments (Item 1(b)); and, (3) Determination that reactor control capability is maintained in the control room or at the alternate shutdown location in the event of smoke (Item 1(b)). The GL further requested information on any compensatory measures in use to demonstrate control room habitability (CRH), and plans to retire them (Item 2).

You reported the results of ASTM E741 [American Society for Testing and Materials, Standard Test Method for Determining Air Change in a Single Zone by Means of a Tracer Gas Dilution] tracer gas tests for the Watts Barr Nuclear Plant, Unit 1 control room:

You determined that the maximum tested value for inleakage into the Control Room Envelope (CRE) was 6 cubic feet per minute (cfm), which is less than the value of 51 cfm assumed in the design basis radiological dose analyses for CRH.

You indicated that your evaluation, in accordance with Regulatory Guide 1.78, supported a conclusion that unfiltered inleakage into the CRE is not specifically incorporated into the hazardous chemical assessment because toxic gases are not considered to be a threat based on hazard screening performed on chemicals stored onsite or transported nearby. You also indicated that reactor control capability is maintained from either the control room or the alternate shutdown locations in the event of smoke.

The GL further requested that you assess your Technical Specifications (TS) 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 concerns regarding the use of a delta (Δ) P measurement to alone provide such verification (Item 1(c)). As permitted by the GL, you provided a schedule for revising the surveillance requirement in the TS to reference an acceptable surveillance methodology. In your August 4, 2004 response, you committed to submit a license amendment request (LAR) to adopt TS Surveillance Requirements (SRs) that verify CRH per Technical Specification Task Force (TSTF)-448, within 9 months following NRC approval of TSTF-448.

The information you provided also supported the fact that there are no compensatory measures needed to be in place to demonstrate CRH.

The information you provided also supported the conclusion that you 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 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 at 301-415-1364.

Sincerely,

/RA/

Douglas V. Pickett, Senior Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-390

cc: See next page

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Sincerely,

/RA/

Douglas V. Pickett, Senior Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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