

October 4, 2006

Mr. J. A. Stall  
Senior Vice President, Nuclear and  
Chief Nuclear Officer  
Florida Power and Light Company  
P.O. Box 14000  
Juno Beach, Florida 33408-0420

SUBJECT: ST. LUCIE NUCLEAR PLANT, UNITS 1 AND 2 - NRC RECEIPT OF  
RESPONSE TO GENERIC LETTER 2003-01, "CONTROL ROOM  
HABITABILITY" (TAC NOS. MB9849 AND MB9850)

Dear Mr. Stall:

The Nuclear Regulatory Commission (NRC) acknowledges the receipt of your response to Generic Letter (GL) 2003-01, "Control Room Habitability," in letters dated August 11, 2003 (Agencywide Documents Access and Management System Accession No. ML032250375), December 9, 2003 (ML033450304), and October 29, 2004 (ML043070441). 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 the St. Lucie Unit 1 and 2 control rooms meet their design bases (e.g., General Design Criteria [GDC] 1, 3, 4, 5 and 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 (GL 2003-01, Item 1a), (2) Determination that the most limiting unfiltered inleakage 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 (CRH) and plans to retire them (GL 2003-01, Item 2).

You reported the results of tracer gas tests for the St. Lucie Unit 1 and 2 control rooms, which are separate control rooms that are pressurized for accident mitigation, using American Society for Testing and Materials standard ASTM E741, "Standard Test Method for Determining Air Change in a Single Zone by Means of a Tracer Gas Dilution."

For Unit 1, you determined that the maximum tested value for inleakage into the Control Room Envelope (CRE) was 423 cubic feet per minute (cfm), which is less than the value of 500 cfm assumed in your operability determination using the current methodology in the Updated Final Safety Analysis Report (UFSAR).

For Unit 2, you determined that the maximum tested value for inleakage into the CRE was 229 cfm, which is less than the value of 430 cfm assumed in your operability determination using the current UFSAR methodology.

You stated your plan to revise each unit's design basis radiological dose analysis for CRH using Alternate Source Term (AST) methodology, which will add some margin by increasing the allowable leakage value.

You indicated that, based on your evaluation, you have concluded that no hazards exist to the control room personnel from postulated chemical releases in and around the plant. 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 analyses for CRH, in light of the demonstrated inadequacy of a delta ( $\Delta$ ) P measurement as the only method to provide such verification (GL 2003-01, Item 1c). As permitted by the GL, you provided a schedule for revising the surveillance requirements (SRs) in the TSs to reference an acceptable surveillance methodology. In your October 29, 2004, response, you indicated that you will submit a license amendment request (LAR) to adopt TS SRs that verify CRH per TS Task Force (TSTF) traveler TSTF-448 within 6 months following NRC approval of TSTF-448.

The information you provided indicated that there are no interim compensatory measures currently required to demonstrate CRH. The NRC staff notes that you rely on an operability determination to demonstrate CRH, which needs to be retired by changing the design basis information in the UFSAR. However, the NRC staff also notes that you have committed to revise your UFSAR design basis radiological dose analyses for CRH using AST methodology.

The information you provided supported the NRC staff conclusion that you are committed to meet the draft GDC for Unit 1 and the GDC for Unit 2 regarding CRH.

Your commitment to revise your design basis radiological dose analyses for CRH using AST methodology and to adopt industry standard TSs based on TSTF-448 is acceptable for purposes of closing out your response to GL 2003-01. The NRC staff will monitor submission of the LARs and interact with you, as necessary, during the amendment process.

If you have any questions regarding this correspondence, please contact me at (301) 415-3974.

Sincerely,

*/RA*

Brendan T. Moroney, Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-335 and 50-389

cc: See next page

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