

March 6, 2007

Mr. Robert J. Duncan II, Vice President
Shearon Harris Nuclear Power Plant
Carolina Power & Light Company
Post Office Box 165, Mail Code: Zone 1
New Hill, North Carolina 27562-0165

SUBJECT: SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1 - NRC RECEIPT OF
RESPONSE TO GENERIC LETTER 2003-01, "CONTROL ROOM
HABITABILITY" (TAC NO. MB9809)

Dear Mr. Duncan:

The Nuclear Regulatory Commission (NRC) acknowledges the receipt of your responses to Generic Letter (GL) 2003-01, "Control Room Habitability," dated August 11, 2003 (ML032260531 [Agencywide Documents and Access Management System Accession Number]); December 9, 2003 (ML033510615); July 23, 2004 (ML042120316); and, October 29, 2004 (ML043090539). This letter provides a status of your response and describes any actions that may be necessary to consider your response to GL 2003-01 complete.

GL 2003-01 requested that you confirm that your control room meets its 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 in-leakage 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 in-leakage 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 Materials, Standard Test Method for Determining Air Change in a Single Zone by Means of a Tracer Gas Dilution) tracer gas tests for the Shearon Harris Nuclear Power Plant, Unit 1 control room which is of positive pressure design.

You determined that the maximum tested value for inleakage into the Control Room Envelope (CRE), was 128 (+/- 7) cubic feet per minute (cfm) which is less than the value of 300 cfm assumed in the design basis radiological analyses for CRH.

You indicated that you have not identified any significant sources of stationary or mobile hazards chemical; therefore, you do not have any acceptance criteria for air inleakage into the CRE for hazardous chemicals. You also indicated that reactor control capability is maintained from either the control room or the Auxiliary Control Panel Room 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, in light of the demonstrated inadequacy of a delta (Δ) P (pressure change) 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 December 9, 2003, response you stated you would submit a proposed license amendment, within 6 months following the approval of Technical Specification Task Force (TSTF)-448, for a new TS surveillance requirement to determine inleakage in accordance with a control room integrity program that relies on the use of tracer gas inleakage testing.

The information you provided also supported the fact that you are required to meet the GDC for CRH.

Your commitment to submit a license amendment request based on TSTF-448 is acceptable for purposes of closing out your response to GL 2003-01.

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

Sincerely,

/RA/

Chandu P. Patel, Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-400

cc: See next page

March 6, 2007

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/RA/

Chandu P. Patel, Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-400

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