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August 8, 2003

10 CFR 50.4

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

In the Matter of) Docket No. 50-390
Tennessee Valley Authority)

WATTS BAR NUCLEAR PLANT (WBN) – UNIT 1 – "RESPONSE TO NUCLEAR REGULATORY COMMISSION (NRC) GENERIC LETTER (GL) 2003-01: CONTROL ROOM HABITABILITY"

Tennessee Valley Authority (TVA) is sending this letter in response to NRC's request in GL 2003-01, dated June 12, 2003. In this GL, NRC requested licensees to provide information regarding the design, maintenance, and testing of nuclear plant control room habitability systems and physical structures. This information is to be provided within 180 days of the GL 2003-01 issuance and would require licensees to respond no later than December 9, 2003. The GL also provides an allowance to respond within 60 days (August 11, 2003) if this schedule cannot be achieved. This letter is to inform NRC that TVA's final response for GL 2003-01 will not meet the 180 day criteria for WBN. Enclosure 1 to this letter provides the basis and necessity for exceeding the 180 day request. Enclosure 2 identifies the commitment contained in this letter.

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This letter is being sent in accordance with NRC RIS 2001-05, " Guidance on Submitting Documents to the NRC by Electronic Information Exchange or on CD-ROM." Please direct questions concerning this issue to P. L. Pace at (423) 365-1824.

Sincerely,

W. R. Lagergren

Enclosures

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M:\SUBMIT\WBN - GL 2003-01 60-Day Response

ENCLOSURE 1

TENNESSEE VALLEY AUTHORITY (TVA)
WATTS BAR NUCLEAR PLANT (WBN)
UNIT 1

RESPONSE TO NUCLEAR REGULATORY COMMISSION (NRC)
GENERIC LETTER (GL) 2003-01: CONTROL ROOM HABITABILITY

WBN will not be able to respond to the aspects of GL 2003-01 within the requested 180-day period. TVA does plan to provide the requested response to the NRC in mid-2004 following unfiltered inleakage testing. This deviation from the NRC request is based on several reasons. The primary impact that necessitates the proposed GL response schedule is the upcoming fall refueling outage for WBN Unit 1 Cycle 5 in September 2003. This outage involves several weeks of pre-outage activities prior to the actual outage start and involves nearly all site personnel during the outage. Insufficient time will be available to complete the actions requested by the 180-day date of December 9, 2003.

Following the outage, TVA will be performing activities to support the requested response including the planned unfiltered inleakage testing. TVA has already started reviewing design documents, drawings, procedures, technical specifications, and other applicable documents and will continue to do so as resources permit throughout the proposed schedule. In addition, TVA will perform required activities to prepare for unfiltered inleakage testing of the control room envelope. Since both WBN and Sequoyah Nuclear Plant (SQN) will be performing this testing, TVA has scheduled a vendor to support this effort on a back to back basis to optimize the testing effort. This testing is currently scheduled to begin in mid-February 2004 and conclude by mid-March 2004. TVA will submit the final response to GL 2003-01 within 90 days of completion of the unfiltered inleakage testing for SQN and WBN.

TVA considers that the proposed schedule for responding to the GL 2003-01 request to be acceptable because of the high level of confidence that WBN has with regard to the acceptability of the control room emergency ventilation system design and operation. This is based on several factors. One of the primary factors is that all air handling components for the control room emergency air clean-up, air conditioning, and pressurization systems are located within the control room envelope. This configuration greatly reduces the potential for inleakage into the envelope.

During the WBN pre-operational testing, an unfiltered inleakage test was conducted on the one pressurized air duct that passes through the control room envelope from another area (the battery room exhaust duct). This test was conducted in July of 1995 and data obtained was used to measure a leakage rate of approximately 1.8 cubic feet per minute (cfm). TVA also evaluated the contribution from pneumatic instrumentation and valve operators, control air usage for fire protection, and from door ingress and egress to the envelope. This contribution was determined to be 3 cfm for pneumatic components and 10 cfm from door activities. The value allocated for wear and tear of sealing media is 36.2 cfm. These inleakage amounts total to 51 cfm and were used to determine acceptability. A maximum pressurizing air flow rate of 711 cfm has also been determined to be acceptable when computing operator dose.

WBN performs surveillance testing of its control room and, as part of that testing, verifies that the control room is at a positive pressure (minimum of 1/8-inch water gauge) to the outside and is at a positive pressure to spaces adjacent to the control room.

Since WBN verifies that the control room is at a positive pressure to adjacent spaces, and with the testing performed on the one potential leak path, this provides the assurance that the unfiltered inleakage flow rate currently used in the dose analyses is acceptable. Based on the above discussions, TVA considers the results of the inleakage testing will confirm acceptable inleakage rates for the control room envelope. TVA’s proposed schedule for responding to GL 2003-01 is appropriate for the reasons previously stated.

ENCLOSURE 2

TENNESSEE VALLEY AUTHORITY (TVA)
WATTS BAR NUCLEAR PLANT (WBN)
UNIT 1

List of Regulatory Commitments

TVA will submit the final response to Generic Letter 2003-01 within 90 days of completion of unfiltered inleakage testing for Sequoyah Nuclear Plant and WBN.