

Tennessee Valley Authority, Post Office Box 2000, Spring City, Tennessee 37381-2000

June 21, 2010

U.S. Nuclear Regulatory Commission ATTN: Document Control Desk Mail Stop: OWFN P1-35 Washington, D.C. 20555-0001

> Watts Bar Nuclear Plant, Unit 2 NRC Docket No. 50-391

10 CFR 50.4

Subject: WATTS BAR NUCLEAR PLANT (WBN) UNIT 2 – INSTRUMENTATION AND CONTROLS STAFF INFORMATION REQUESTS

Reference: Licensee Open Items to be Resolved for SER Approval List

The purpose of this letter is to provide TVA's response to an NRC information request item contained on the "Licensee Open Items to be Resolved for SER Approval List." The enclosure to this letter provides TVA's response to the information requested by NRC.

I declare under the penalty of perjury that the foregoing is true and correct. Executed on the 21st day of June, 2010.

If you have any questions, please contact William Crouch at (423) 365-2004.

Sincerely,

Masoud Bajestani

Watts Bar Unit 2 Vice President

Enclosure:

1. Responses to Licensee Open Items To Be Resolved For SER Approval

cc: See page 2

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cc (Enclosure):

U. S. Nuclear Regulatory Commission Region II Marquis One Tower 245 Peachtree Center Ave., NE Suite 1200 Atlanta, Georgia 30303-1257

NRC Resident Inspector Unit 2 Watts Bar Nuclear Plant 1260 Nuclear Plant Road Spring City, Tennessee 37381

ENCLOSURE

WATTS BAR NUCLEAR PLANT (WBN) UNIT 2 INSTRUMENTATION AND CONTROLS STAFF INFORMATION REQUESTS

This enclosure provides TVA's response to an NRC information request item contained on the "Licensee Open Items to be Resolved for SER Approval List." Each NRC information request is identified by the unique numbering system utilized in the aforementioned NRC list of open actions.

1. NRC Request (Item No. 116)

The Eagle 21 boards originally had a conformal coating. However, the new boards do not. Provide the basis for deletion of the conformal coating.

TVA Response:

The following non-proprietary response was developed from proprietary Westinghouse letter WBT-D-2063 (Reference 1).

Only the Eagle 21 Analog Input, RTD Input, Partial Trip and Analog Output boards were originally conformally coated. The original design conformally coated these boards in their entirety. The technical reason for coating was to ensure performance at high humidity, with the major concern being the effects of humidity on low level analog circuitry.

Following the original Eagle 21 system qualification, the Analog Input, RTD Input, and Analog Output boards were successfully tested at high humidity without being conformal coated in their entirety as part of the Eagle Series Hardware Verification test effort.

Currently, the manufacturing specifications for the Analog Input and RTD Input boards specify selective areas of conformal coating, and the Analog Output board does not require any conformal coating. The Partial Trip board is a high signal level digital output board that is not susceptible to slight changes in high levels of resistance between traces as is possible with a low level analog circuit. Thus, there is no technical reason to conformally coat the Partial Trip board.

NRC may view the Westinghouse testing and qualification reports at the Westinghouse Watts Bar site office.

Reference:

1. Westinghouse letter WBT-D-2063, "Tennessee Valley Authority Watts Bar Nuclear Plant Unit 2, Basis for Removal of Conformal Coating Requirement on Eagle 21 Boards"