



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

December 5, 2007

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

In the Matter of) Docket No. 50-391
Tennessee Valley Authority)

WATTS BAR NUCLEAR PLANT (WBN) - UNIT 2 - WESTINGHOUSE EAGLE-21 PROCESS PROTECTION SYSTEM

The purpose of this letter is to notify the NRC that consistent with WBN Unit 1, TVA intends to use the Westinghouse Eagle-21 process protection system on WBN Unit 2. The Westinghouse Eagle-21 process protection system is currently installed on WBN Unit 1.

TVA chose the Westinghouse Eagle-21 process protection system for WBN Unit 2 based on fidelity with WBN Unit 1, familiarity with the system, its proven design and the reliability it has shown in service at both WBN and Sequoyah.

The WBN Unit 2 Westinghouse Eagle-21 process protection system will be constructed to the same specification and standards as the WBN Unit 1 Eagle-21 system. WBN Unit 2 hardware will be identical or equivalent to WBN Unit 1. WBN Unit 2 safety related firmware will be identical to the WBN Unit 1 firmware.

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NRR

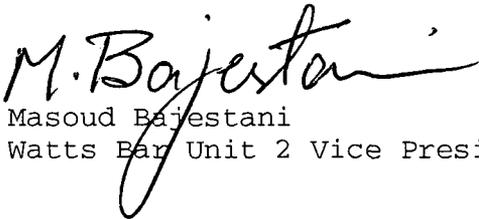
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The Eagle-21 system was approved by the NRC for WBN Unit 1 prior to initial power operation in References 1 and 2. In Reference 2, the staff concluded that TVA provided adequate diversity and defense against postulated common-mode failures. The Westinghouse safety system setpoint methodology was approved for WBN Units 1 and 2 in Reference 3.

TVA has made one design change to the WBN Unit 1 Eagle-21 system under 10 CFR 50.59 after initial licensing. An external unidirectional communications interface was installed between the Eagle-21 test subsystem and the plant process computer. This non-safety-related change allows the process computer to acquire data from the Eagle-21 system. This same modification will be performed for the WBN Unit 2 Eagle-21 system.

If you have any questions, please contact me at (423) 365-2351.

Sincerely,



Masoud Bajestani
Watts Bar Unit 2 Vice President

References:

1. NRC letter dated June 13, 1989, "Eagle-21 System for Watts Bar Nuclear Plant"
2. NUREG-0847 Supplement No. 13 - Safety Evaluation Report related to the operation of Watts Bar Nuclear Plant Units 1 and 2, April 1994
3. NUREG-0847 Supplement No. 15 - Safety Evaluation Report related to the operation of Watts Bar Nuclear Plant Units 1 and 2, June 1995

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