



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

MAR 04 1994

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Gentlemen:

In the Matter of the Application of )  
Tennessee Valley Authority ) Docket Nos. 50-390

WATTS BAR NUCLEAR PLANT (WBN) UNIT 1 - GENERIC LETTER 89-13, SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY-RELATED EQUIPMENT - REVISED COMMITMENT SCHEDULE

This letter amends the commitment completion schedule from TVA's letter dated January 26, 1990, concerning Recommended Action II of the subject response for WBN Unit 1. In TVA's response, TVA stated that the heat exchanger test program, including initial performance testing, will be implemented during performance of the prestart test program to support fuel load. TVA is modifying this commitment to complete the initial heat exchanger performance testing from "will be implemented during performance of the prestart test program to support fuel load" to "before plant startup following the first refueling outage." This revised implementation schedule was discussed with NRC WBN Project Manager, P. Tam, and is consistent with the schedule allowed for implementation of Recommended Action II as clarified in Supplement 1 of the generic letter.

Generic Letter 89-13 requires utilities to establish a program to assure that the heat removal requirements of safety-related service water system heat exchangers are satisfied. Recommended Action II of the generic letter states "Conduct a test program to verify the heat transfer capability of all safety-related heat exchangers cooled by service water." TVA initially revised the existing emergency raw cooling water (ERCW) safety-related heat exchanger testing program to incorporate those recommendations in the scope of the program. Since that time, TVA has determined that the scope of this performance testing program is more extensive than originally estimated. TVA plans to have the Generic Letter 89-13 program test procedures issued before fuel load and intends to perform before fuel load, a preliminary test on one heat exchanger from each group of heat exchangers that will be verified by

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testing. This test group includes a diesel generator jacket water cooler, an engineered safety feature (ESF) pump room cooler, and a CCS heat exchanger. These preliminary tests will assist the heat exchanger test engineer in development of the test procedures and the software Verification and Validation Program.

Service water heat exchanger heat removal requirements for other safety-related systems will be demonstrated by periodic maintenance and inspection. These heat exchangers include the ERCW pump motor thrust bearing cooling coils, water chiller condensing units, and the auxiliary control air compressor cylinder jacket cooler and air aftercooler. The lack of steady state conditions in those heat exchangers and the inability to accurately model and test those heat exchangers makes them unsuitable for performance testing.

WBN's existing maintenance program includes eddy current testing of the diesel generator and CCS heat exchangers, cleaning of the ESF room cooler coils, and cleaning of the emergency chiller condensers. Reduction of biofouling is aided by the online chemical control system. In addition, the WBN Startup and Test Program tests the ERCW waste heat rejection capability in accordance with Regulatory Guide 1.68. The ERCW flow balance test is also conducted during startup testing. For these reasons, assurance is provided that the heat exchangers will adequately perform their design functions.

If you should have any questions concerning this matter, please telephone J. Vorees at (615)-365-8819.

Very truly yours,



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