TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

5N 157B Lookout Place

JUN 0 3 1988

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

Gentlemen:

 In the Matter of
)
 Docket Nos. 50-327

 Tennessee Valley Authority
)
 50-328

)
 50-390
)

)
 50-391
)

)
 50-438
)

)
 50-439
)

TENNESSEE VALLEY AUTHORITY (TVA) - NUCLEAR REGULATORY COMMISSION (NRC) GENERIC LETTER 88-03, STEAM BINDING OF AUXILIARY FEEDWATER (AFW) PUMPS

- References: 1. R. L. Gridley's letter to Dr. J. Nelson Grace (NRC) dated January 27, 1986, "Watts Bar Nuclear Plant (WBN) Units 1 and 2 -IE Bulletin 85-01 - Steam Binding of Auxiliary Feedwater Pump"
 - R. L. Gridley's letter to Dr. J. Nelson Grace (NRC) dated October 16, 1986, "Bellefonte Nuclear Plant (BLN) Units 1 and 2 - IE Bulletin 85-01 - Steam Binding of Auxiliary Feedwater Pumps"

Enclosed is TVA's response to the subject generic letter for TVA's pressurized water reactors (PWR). The generic letter requested that each addressee provide a letter of confirmation to NRC indicating that the procedures discussed in this generic letter are in place and will be maintained at PWR plants. Inspection and Enforcement (IE) Bulletin 85-01 previously requested WBN and BLN to take interim measures until the long-term resolution could be decided upon. TVA's commitments in response to IE Bulletin 85-01 (see references 1 and 2 for WBN and BLN) will be retained to comply with the subject generic letter. IE Bulletin 85-01 was not issued for Sequoyah Nuclear Plant (SQN) since SQN had already taken actions to minimize the occurrence of AFW pump steam binding.

Enclosure 1 provides TVA's position for SQN, WBN, and BLN on monitoring steam binding and restoring the AFW system to operable status should steam binding occur. Enclosure 1 discusses the procedures which implement the requirements of the subject generic letter. SQN and WBN procedures will be revised to ensure they continue to comply with Generic Letter 38-03 Summary statements of commitments contained in this submittal are provided in Enclosure 2.

An Equal Opportunity Employer

8806140365 880603 PDR ADOCK 0500032 P DCD

U.S. Nuclear Regulatory Commission

JUN 0 3 1988

On May 26, 1988, a response submittal due date of June 10, 1988 was set with NRC for this generic letter. This date was coordinated with Auluck Rajender, NRC Project Manager for WBN and BLN, Jack Donohew, NRC Project Manager for SQN, and Steve Elrod and Frank McCoy, NRC Region 11 Office.

If there are any questions concerning this response, please have someone of your staff telephone W. C. Ludwig at (615) 751-4882.

To the best of my knowledge, I declare the statements contained herein are complete and true.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

R. Gridley, Director Nuclear Licensing and Regulatory Affairs

Enclosures cc (Enclosures): Mr. K. P. Barr, Acting Assistant Director for Inspection Programs TVA Projects Division U.S. Nuclear Regulatory Commission Region II 101 Marietta Street, NW, Suite 2900 Atlanta, Georgia 30323 Mr. G. G. Zech, Assistant Director for Projects TVA Projects Division U.S. Nuclear Regulatory Commission One White Flint, North 11555 Rockville Pike Rockville, Maryland 20852 Bellefonte Resident Inspector Bellefonte Nuclear Plant P.O. Box 2000 Hollywood, Alabama 35752

Sequoyah Resident Inspector Sequoyah Nuclear Plant 2600 Igou Ferry Road Soddy Daisy, Tennessee 37379

Watts Bar Resident Inspector Watts Bar Nuclear Plant P.O. Box 700 Spring City, Tennessee 37381

Enclosure 1

Response to NRC Generic Letter 88-03

SQN and WBN have procedures in place to monitor on each shift the fluid conditions in the AFW system. These procedures provide the guidelines for recognizing indications of steam binding and maintaining system operability until check valves are repaired and backleakage stopped.

SQN Operations Group Section Instruction Letter 99, "Assistant Unit Operator (AUO) Duty Locations and Responsibilities," requires an AUO inspection of the AFW pumps once each shift. The AUO is required to notify the shift supervisor if the discharge piping is hot. SQN System Operating Instruction (SOI) 3.2, "Auxiliary Feedwater System," identified pump discharge lines at a temperature greater than 125 degrees Fahrenheit (F) as an indication of backleakage. At temperatures equal to or greater than 200 degrees F, venting of pump casing is required every four hours until the leaking check valve is repaired.

WBN Operations Section Letter A-27, "Auxiliary Building Area and Equipment Daily Checklist OSLA 27-6," requires the AUO to record the discharge temperature of the turbine-driven and two motor-driven pumps. A precaution in WBN SOI 3.2, "Auxiliary Feedwater System," instructs the AUO on actions to take if the pump casing is found to be hot (200 degrees F). SOI 3.2 states that if a pump casing is found to be hot (200 degrees F), then the pump must be vented once every four hours until the cause is found and corrected.

BLN will monitor AFW pump discharge temperature. The modifications and/or procedural requirements necessary to accomplish this will be completed before unit 1 fuel load. The procedures to be developed will meet the intent of IE Bulletin 85-01 and Generic Letter 88-03 regarding monitoring fluid conditions, recognizing steam binding, and restoring the AFW system to operable status should steam binding occur.

Enclosure 2

List of Commitments

- 1. SQN and WBN will revise the appropriate procedures referenced in enclosure 1 to identify the applicable portions as NRC requirements. The revisions will ensure the procedures continue to comply with Generic Letter 88-03. SQN will revise their procedures by July 30, 1988, and WBN will complete their revisions before unit 1 fuel load.
- 2. BLN will monitor AFW pump discharge temperature. The modifications and/or procedural requirements necessary to accomplish this will be completed before unit 1 fuel load.