



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

JUL 19 1994

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

Gentlemen:

In the Matter of the Application of)
Tennessee Valley Authority) Docket Nos. 50-390
50-391

WATTS BAR NUCLEAR PLANT (WBN) - UNITS 1 AND 2 - NRC INSPECTION REPORT NO.
50-390/94-47 AND 390/93-204 - REPLY TO NOTICE OF VIOLATION

The purpose of this letter is to provide a reply to Notice of Violation
50-390/94-47-02 cited in the subject inspection report dated
June 21, 1994. Notice of Violation 50-390/94-47-02 identifies a
deficiency in that requirements contained in a system description were not
translated into an Alarm Response Procedure.

Enclosure 1 to this letter addresses the specific conditions described in
the inspection report and the corrective actions taken by TVA. The
commitments made by this submittal are listed in Enclosure 2.

If you should have any questions, contact P. L. Pace at (615)-365-1824.

Sincerely,

Dwight E. Nunn
Vice President
New Plant Completion
Watts Bar Nuclear Plant

Enclosures
cc: See page 2

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cc (Enclosures):

NRC Resident Inspector
Watts Bar Nuclear Plant
Rt. 2, Box 700
Spring City, Tennessee 37381

Mr. P. S. Tam, Senior Project Manager
U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Rockville, Maryland 20852

U.S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

ENCLOSURE 1

WATTS BAR NUCLEAR PLANT UNIT 1
RESPONSE TO NRC'S JUNE 21, 1994, LETTER TO TVA
NRC VIOLATION 50-390/94-47-02

Description of Violation 50-390/94-47-02

"10 CFR 50, Appendix B, Criteria III, as implemented by the TVA Nuclear Quality Assurance Plan, TVA-NQA-PLN89-A, Revision 3, requires measures which assure that regulatory requirements and design basis are correctly translated into specifications, drawings, procedures, and instructions for safety-related nuclear plant structures, systems, and components.

System Description N3-32-4002, "Compressed Air System," Revision 3, provides the design basis for the auxiliary control air system.

Contrary to the above, System Description N3-32-4002 was not translated into Alarm Response Procedure 131-137, "Annunciation Response Instruction," Revision 0, for "AUX AIR TR-A MOISTURE HI" annunciator in that the procedure did not: 1) provide the alarm set point for moisture in the auxiliary control air system in the same units as used for the design basis as stated in the system description (i.e., percent relative humidity versus dew point); and 2) provide information that the alarm set point (approximately +22 degrees Fahrenheit) was greater than the design basis of -40 degrees Fahrenheit as stated in the system description."

TVA Response

TVA concurs with the violation.

Reason for the Violation

The system description did not clearly specify the system design basis dewpoint. The system description identifies that the air dryers are specified to deliver -40 degrees F air. Consistent with TVA's response to Generic Letter 88-14, the design basis of the system was originally 18 degrees F below the lowest normal room temperature in accordance with Instrument Society of America (ISA) Standard 7.3. The lowest normal room temperature at WBN for interior plant rooms, per the Environmental drawings, is 40 degrees F, therefore, the system design basis dewpoint temperature was 22 degrees F and the installed plant instrument was set to correspond to this. In addition, TVA's response to Generic Letter 88-14 indicated that the testing acceptance criteria for the dewpoint was between -40 degrees F and 0 degrees F. The 0 degree F dewpoint was established to provide operating margin between the -40 degrees F design value and the 6 percent relative humidity alarm setpoint.

ENCLOSURE 1

WATTS BAR NUCLEAR PLANT UNIT 1 RESPONSE TO NRC'S JUNE 21, 1994, LETTER TO TVA NRC VIOLATION 50-390/94-47-02

Corrective Steps That Have Been Taken and The Results Achieved

In support of the Generic Letter 88-14 commitment and preoperational test instruction acceptance criteria development, Design Change Notice (DCN) S-27201 has revised the system description to indicate a system design basis dewpoint of 0 degrees F which equates to two percent relative humidity. Additionally, System Description N3-32-4002 was revised by DCN S-31923 to state the dewpoint in both degrees F and percent relative humidity. DCN W-31268 has been issued to install instrumentation capable of detecting two percent relative humidity. Design documents have revised the instrumentation setpoint to correspond to the system design basis dewpoint. The instrument still measures percent relative humidity; however, the setpoint assures annunciation in the event the design basis dewpoint is exceeded. Once the instruments are installed and calibrated, the setpoint referenced in Annunciator Response Instruction (ARI)-131-137 will be updated to reflect two percent relative humidity.

Corrective Steps That Will Be Taken To Avoid Further Violations

As it was stated in the system description, the statement that the air dryers are specified to deliver -40 degrees F air could have been misinterpreted as the design basis setpoint. This has been corrected with the revisions to the system description and additional clarification made with the statement of the dewpoint in both degrees F and percent relative humidity. Therefore, no further actions related to design documentation beyond those described above are required to avoid further violations.

Resolution of the commitment made in GL 88-14 which states that procedures will be written or revised as appropriate to require internal inspection of components suspected of contamination following indication of contamination due to the presence of water, particulates, or oil in system headers was initially considered to be fulfilled with the issuance of Revision 0 of Technical Instruction (TI) 104, "Instrument Air Quality." However, additional guidelines have been placed in "Alarm Response Procedure," ARI-131-137, to ensure that the notification of the system engineer will occur upon receipt of a high moisture alarm. This action was taken to ensure that a consistent response to the alarm occurs, even though Site Operations' routine response to the high moisture alarm would have been to notify the appropriate system engineer(s) so that an evaluation could be performed.

Date When Full Compliance Will Be Achieved

Compliance has been achieved through the issuance of DCNs S-27201, S-31923 and W-31268. Installation of the instrumentation and the revision of the ARI and the system description will be completed in support of the site schedule for release of System 32 to Site Operations from Startup and Test.

ENCLOSURE 2

WATTS BAR NUCLEAR PLANT UNIT 1
RESPONSE TO NRC'S JUNE 21, 1994, LETTER TO TVA
NRC VIOLATION 50-390/94-47-02

List of Commitments

1. DCN W-31268 has been issued to install instrumentation capable of detecting two percent relative humidity.
2. Once the instruments are installed and calibrated, the setpoint referenced in ARI-131-137 will be updated to reflect two percent relative humidity.

Note: Implementation of these commitments will be completed in support of the site schedule for release of System 32 to Site Operations from Startup and Test.