



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

MAR 05 1996

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

Gentlemen:

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

WATTS BAR NUCLEAR PLANT (WBN) - UNIT 1 - FACILITY OPERATING LICENSE
NPF-90 - NRC INSPECTION REPORT NO. 50-390/95-80 - REPLY TO NOTICE
OF VIOLATION

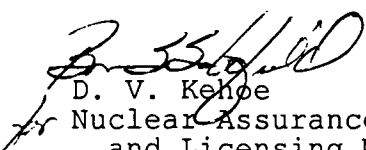
The purpose of this letter is to provide a reply to Violations 390/95-80-04 and 390/95-80-05 cited in the subject Inspection Report dated February 8, 1996. The violations concern four examples of failure to follow procedures related to surveillance testing and maintenance activities.

In a letter to the staff dated January 12, 1996, TVA provided Licensee Event Report (LER) 50-390/95002 which provides details associated with Example 1 of Violation 390/95-80-04. TVA's letter of January 24, 1996, provided the staff with LERs 50-390/95003 and 50-390/95004 which provide details associated with Violation 390/95-80-05, Examples 1 and 2, respectively.

Enclosure 1 provides TVA's reply to Violation 390/95-80-04.
Enclosure 2 provides TVA's reply to Violation 390/95-80-05.

If you should have any questions, please contact P. L. Pace at (423) 365-1824.

Sincerely,


D. V. Kenoe
for Nuclear Assurance
and Licensing Manager

Enclosures
cc: See page 2

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ENCLOSURE 1

WATTS BAR NUCLEAR PLANT UNIT 1
REPLY TO NRC'S FEBRUARY 8, 1996, LETTER TO TVA
VIOLATION 390/95-80-04

DESCRIPTION OF VIOLATION

"Technical Specification 5.7.1.1 requires that written procedures shall be established, implemented, and maintained for activities recommended in Appendix A of Regulatory Guide 1.33, Quality Assurance Program Requirements, Revision 2, February 1978. This includes procedures required for the safe operation and maintenance of nuclear power plants including equipment surveillance instructions.

Site Standard Practice SSP-8.02, Surveillance Program, Revision 6, Section 2.5.3.A, requires, in part, that qualified personnel shall evaluate surveillance data and determine its acceptability against specified acceptance criteria. Failure to meet acceptance criteria which may affect operability of the affected equipment shall be immediately communicated to the main control room.

Contrary to the above:

1. On December 10, 1995, during performance of Surveillance Instruction 0-SI-03-3, Weekly Log, Revision 1, four of the eight 480 volt shutdown electrical board voltages were logged as 510 volts, above the maximum specified acceptance criteria of 508 volts. The readings were not recognized as being above the specified acceptance criteria, were not immediately communicated to the main control room, and actions to declare the equipment inoperable were not taken until the omission was discovered on December 13, 1995.
2. On December 31, 1995, during performance of Technical Requirements Instruction 1-TRI-30-1, Balance of Plant Temperature Monitoring program, Revision 1, the licensee recorded north and south valve vault room temperatures which were below the minimum specified acceptance criteria on the temperature log sheet. The low temperature readings were not communicated to the main control room, and the appropriate actions were not taken at the time the readings were logged."

TVA RESPONSE

TVA agrees that this violation occurred.

REASON FOR THE VIOLATION (EXAMPLE 1)

The violation occurred because of personnel error. As a result of insufficient review and attention to detail, the surveillance performer, initial reviewer, and final SRO reviewer failed to identify the out-of-specification readings.

CORRECTIVE STEPS THAT HAVE BEEN TAKEN AND RESULTS ACHIEVED (EXAMPLE 1)

The Required Actions of WBN Technical Specification LCO 3.8.10 were entered and immediate actions taken to restore the voltage to within limits.

On December 13, 1995, an independent review was performed of five 0-SI-0-3 data packages performed since WBN Unit 1 fuel load. There were no other instances where the recorded data failed to meet the specified acceptance criteria.

To confirm that the personnel errors were not widespread, a sample of 43 Operations surveillance instructions were reviewed for Technical Specification acceptance criteria. No additional instances were observed where data exceeding acceptance criteria limits were certified as acceptable.

CORRECTIVE STEPS THAT HAVE BEEN TAKEN TO AVOID FURTHER VIOLATIONS (EXAMPLE 1)

Immediately following the event, the Operations Manager, Plant Manager, and Site Vice President emphasized expectations concerning licensed activities at WBN to the Operations Staff and Shift Operations Supervisors, including discussion of this event.

In addition, Operations management discussed this event with each Operations shift crew including their expectations for the prompt review of acceptance criteria during performance of surveillances. These discussions were followed-up by a written directive from the Operations Manager to Operations personnel reiterating expectations for performance of surveillances.

Operations Standing Order SO-96-001 was issued on January 5, 1996, to provide additional guidance for review of acceptance criteria in Operation's "data-taking" type surveillances.

The licensed individuals involved with failure to identify the out-of-limit voltage data were counseled and disciplined.

REASON FOR THE VIOLATION (EXAMPLE 2)

The violation resulted from an isolated personnel error. A WBN non-licensed assistant unit operator (NAUO) recorded room temperatures for the north and south main steam valve vaults at 47°F and 62°F, respectively. The NAUO did not notice that the recorded data exceeded the acceptance criteria minimum limit of 80°F. Earlier performances of the temperature surveillance by the NAUO in Mode 4 (when compliance with the temperature limits is not required) contributed to the AUO's inattentiveness. The out-of-limit condition was identified during the required independent review of the surveillance package on the following shift.

CORRECTIVE STEPS THAT HAVE BEEN TAKEN AND RESULTS ACHIEVED (EXAMPLE 2)

The NAUO was counseled and disciplined.

The Technical Requirement Manual temperature limit of 80°F is applicable at the location of the main steam safety valves (MSSVs). The NAUO had collected the temperature data from a cooler area of the

valve rooms. The out-of-limit temperatures recorded by the NAUO were evaluated and determined to not actually be below 80°F at the MSSVs.

As discussed in Example 1 of the violation, no additional similar occurrences have been observed in Operations Department procedures.

CORRECTIVE STEPS THAT HAVE BEEN TAKEN TO AVOID FURTHER VIOLATIONS
(EXAMPLE 2)

The corrective steps taken to avoid further violation in Example 1 above are applicable to Example 2. The initial discussions with Operations personnel (discussed in Example 1) did not prevent the second violation example. Therefore, TVA took additional actions to communicate expectations in this area, including issuing written guidance such as Standing Order SO-96-001.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

With respect to both examples of the cited violation, TVA is in full compliance.

ENCLOSURE 2

WATTS BAR NUCLEAR PLANT UNIT 1
REPLY TO NRC'S FEBRUARY 8, 1996, LETTER TO TVA
VIOLATION 390/95-80-05

DESCRIPTION OF VIOLATION

"Technical Specification 5.7.1.1 requires that written procedures shall be established, implemented, and maintained for activities recommended in Appendix A of Regulatory Guide 1.33, Quality Assurance Program Requirements, Revision 2, February 1978. This includes procedures required for the safe operation and maintenance of nuclear power plants including equipment control instructions.

Site Standard Practice SSP-6.02, Maintenance Management System, Revision 16, Sections 2.5.4.H.4 and 2.4.2, requires, in part, additional planning of a work order if additional instruction is required to correct the malfunction during a troubleshooting activity. Site Standard Practice SSP-2.55, Procedure Use and Adherence, Revision 2, Section 2.2.1, requires the performer to read each step prior to performance of the step if a procedure is designated as "Continuous Use." Instrument Maintenance Instruction IMI-99.047, Solid State Protection System Train A Removal and Return to Service, Revision 0, is designated as a "Continuous Use" procedure.

Site Standard Practice SSP-2.55, Procedure Use and Adherence, Revision 2, Section 2.2.1, requires procedures designated as "Continuous Use" to be followed exactly in sequence. Surveillance Instruction 1-SI-99-201-A, Response Time Test of Reactor Trip Breaker Train A, Revision 0, is designated as a continuous use procedure.

Contrary to the above:

1. On December 25, 1995, the scope of troubleshooting Work Order 95-28700-00 was changed to add the removal and restoration of the A-train of the solid state protection system without additional planning being performed to include additional written instructions. Instrument Maintenance Instruction IMI-99.047 was not referenced by the performer prior to performing step 6.2.6, to place the main feedwater isolation reset switches in RESET before placing the input error inhibit switch in NORMAL when restoring the A-train of the solid state protection system to service. The step was consequently not performed as required and caused Feedwater Isolation to occur.
2. On December 26, while attempting to return equipment to normal and exit Surveillance Instruction 1-SI-201-A, technicians reversed the sequence of steps and performed step 6.2.12 in reverse by placing the input error inhibit switch back to the NORMAL position after it had previously been placed from the NORMAL to the INHIBIT position by step 6.2.12, causing a Feedwater Isolation to occur."

TVA RESPONSE

TVA agrees that this violation occurred.

REASON FOR THE VIOLATION (EXAMPLE 1)

The violation occurred because of personnel error. Contrary to station policy, the system engineer was performing IMI-99.047 from memory and did not request the operator to place and hold the feedwater isolation reset switches in the reset position while he placed the input error inhibit switch on Solid State Protection System (SSPS) to normal.

CORRECTIVE STEPS THAT HAVE BEEN TAKEN AND RESULTS ACHIEVED (EXAMPLE 1)

The main feedwater isolation (FWIS) was reset, and main feedwater long cycle operation was then re-established.

CORRECTIVE STEPS THAT HAVE BEEN TAKEN TO AVOID FURTHER VIOLATIONS (EXAMPLE 1)

The system engineer was counseled on the failure to replan the work order and on not using the written procedure.

The Technical Support Manager and the Maintenance Planning and Technical Superintendent issued memorandums to their employees warning of the consequences of not replanning work orders and not following procedures.

REASON FOR THE VIOLATION (EXAMPLE 2)

The violation occurred because the order in which the procedural steps were listed in the test resulted in unanticipated alarms. In response to the unanticipated alarms, the Assistant Shift Operations Supervisor directed the technicians to return the system to normal. The technicians backed up one step in the surveillance test without fully considering the consequences. Also, there was a verbal communication failure between the Assistant Shift Operations Supervisor and the technicians.

CORRECTIVE STEPS THAT HAVE BEEN TAKEN AND RESULTS ACHIEVED (EXAMPLE 2)

The FWIS was reset, and main feedwater long cycle operation was then re-established.

Surveillance Instruction (SI) 1-SI-99-201-A was revised to correct the sequence of the steps which caused the unanticipated alarms. The instruction was successfully performed later in the day of the occurrence.

The SSPS procedures used during power operations were reviewed for proper step sequence. There were no other similar problems identified.

CORRECTIVE STEPS THAT HAVE BEEN TAKEN TO AVOID FURTHER VIOLATIONS (EXAMPLE 2)

The remaining SSPS procedures that remove and return SSPS to service were reviewed with no additional findings.

Site Standard Practice (SSP)-2.55, "Procedure Use and Adherence," was revised to include management expectations when performance of a procedure must be terminated before the end of the procedure.

Operations and the Maintenance Instrument Group conducted briefings covering the event causes and corrective actions, the need for formal communications with other groups, and how to recognize abnormalities in SSPS functions.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED (EXAMPLES 1 AND 2)

With respect to both examples of the cited violation, TVA is in full compliance.