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FEB 24 1998

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
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Gentlemen:

In the Matter of) Docket No. 50-390
Tennessee Valley Authority)

**WATTS BAR NUCLEAR PLANT (WBN) UNIT 1 - NRC INSPECTION REPORT
390/97-10 - REPLY TO NOTICE OF VIOLATION 390/97-10-02**

The purpose of this letter is to provide a reply to Notice of Violation 390/97-10-02. This violation involved two mispositioned diesel generator 2B-B fuel oil handswitches. The enclosure provides TVA's response to this violation. TVA has previously provided a detailed discussion of this event in Licensee Event Report 390/97-016 dated December 24, 1997. No new commitments result from this submittal.

As part of the corrective action taken for an unrelated status control issue that occurred in September 1996, WBN has continued to maintain trending data for status control issues. WBN management reviews this information periodically as a means to maintain oversight and awareness of status control issues. A review of this trending data to date indicates that the overall significance of status control incidents and the impact of personnel related incidents have decreased and remain on an overall improving trend. One manifestation of this trend can be found in WBN Operations' performance during the Unit 1 Cycle 1 (U1C1) refueling outage, which was significantly better than their performance during the mid-cycle outage. And while

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maintenance-related issues increased during the U1C1 refueling outage, we believe that this increase is related to the significant increase in both staff and activities which were estimated to be greater than five times the non-outage activity level. There have been no status control issues identified, including low threshold events, for over 60 days. TVA management continues to focus significant attention on this matter.

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

Sincerely,



R. T. Purcell

Enclosure

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cc (Enclosure):

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ENCLOSURE
WATTS BAR NUCLEAR PLANT
REPLY TO NOTICE OF VIOLATION
390/97-10-02

DESCRIPTION OF THE VIOLATION

"During an NRC inspection conducted on November 23, 1997, through January 3, 1998, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violation is listed below:

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. Item 3 of Appendix A requires procedures for startup, operation, and shutdown of safety-related systems.

System Operating Instruction (SOI)-82.04, Diesel Generator (DG) 2B-B, Revision 27, Step 5.3 [2], requires the fuel oil day tank transfer pump control switches to be in automatic for standby lineup.

Contrary to the above, on December 5, 1997, the control switches for the fuel oil transfer pumps were found in the off position, which would have precluded automatic operation."

TVA RESPONSE

TVA agrees that the violation occurred.

REASON FOR THE VIOLATION

The specific cause for this violation could not be determined. WBN determined that the most likely cause was an unintentional mispositioning during other work activities. (TVA reported this event in Licensee Event Report 390/97-016 on December 24, 1997.) Upon discovery of the mispositioned switches, WBN conducted a thorough review of recent work records to identify any possible activities on the alarm panel where the switches were located. This review identified two recent activities, one involving a monthly surveillance run on 2B-B emergency diesel generator (EDG), and the second involving a check valve test of the EDG air start system. Review of these two activities could not confirm that the mispositioning occurred as a result of either of these activities.

However, as discussed below, TVA identified that the performance of the 2B-B EDG surveillance did not meet management expectations for configuration status control. This condition involved a change in test methodology by some operations test personnel which manipulated the switches to shorten the test, conserve fuel, and still provide what was thought to be an acceptable method of

performing the test. This method, however, did not provide a verification of as-left switch position. Corrective actions addressed the performance of that surveillance.

The 2B-B diesel air start system check valve test occurred about 15 hours after the fuel oil tests. This test manipulated adjacent switches on the same panel. Interviews with the involved assistant unit operators (AUOs) indicated that their recollection was of lit green (AUTO) handswitches lights. Further, RONAN alarm printouts for checks performed during operator rounds for 10 consecutive days confirmed that AUOs used the alarm panel test buttons. AUOs use these test buttons, located within a few inches of the mispositioned switches, during rounds to check the panel alarm lights. It is not credible to consider that 10 consecutive days of these activities failed to identify the fuel oil switches lights being unlit.

A review of a list of other work (7 work orders) on adjacent EDGs (in the same building) did not identify any activities that could reasonably impact the 2B-B EDG.

Because no work items could be identified that could have resulted in reconfiguring the switches, WBN conducted a review of the security logs that records entry into the building. WBN does not consider that the possibility of intentional tampering with these switches is likely or that there is a likely end objective for tampering.

As a result of the review, WBN did not determine the specific cause of the mispositioned switches.

During the investigation, WBN identified an instance of a failure to follow site procedure. Performance in this case did not meet the standards expected for the Watts Bar plant. WBN management has taken strong action to identify and promptly correct these deficiencies as described below. These actions have also addressed the likely cause of an unintentional mispositioning during other work activities.

CORRECTIVE STEPS TAKEN AND THE RESULTS ACHIEVED

Once identified, the operators placed the diesel generator 2B-B fuel oil transfer pump handswitches into the AUTO position. Operators verified the comparable handswitches for the other diesel generators to be in the AUTO position.

Operations management was present at the next two diesel generator runs on December 9 and 15, 1997. They validated the time required to perform the surveillance instruction as written to ensure that both fuel oil pumps started as required in the "AUTO" position.

WBN has performed "table-top" examinations of selected procedures and reviewed procedure feedback forms. These examinations determined whether areas may exist where procedures can not be performed as written or where the procedure may inadvertently allow the performer too much latitude in the absence of discrete, specific instructions. The results of this review have identified several procedures that require correction or enhancement through the addition of more information. In the Operations area for example, the review identified a few errors and several enhancements in five selected safety-related monthly surveillance procedures. These procedures included tests of Auxiliary Building Gas Treatment, Emergency Gas Treatment System, Safety Injection, Auxiliary Feedwater, Essential Raw Cooling Water, Reactor Protection, and Containment Spray. One example item identified involved a requirement to isolate/unisolate a sight glass without providing specific guidance. In addition, Operations has issued a Night Order to perform surveillance reviews as part of pretest briefings to identify potential instances where the test cannot be performed as written.

WBN conducted a review of the procedure compliance data collected by Nuclear Assurance during the recent outage to confirm a possible limited scope of test performance issue. That review found no procedure compliance issues during 95 observations of Operations and only two issues from 577 observations for the rest of the plant.

Operations Shift Managers have conducted one-on-one interviews with their personnel in an effort to find any other similar procedure issues that crews may be working around. These interviews stressed expectations for continued verbatim compliance and for more attentiveness to plant material condition during rounds and ownership of the plant.

Because management oversight of AUO rounds has improved performance in that area, WBN now conducts overviews of Operations' surveillance performances.

Other site departments selected a sample of surveillances performed by their organization. Plant management observed a sample of surveillances during performance based on their complexity and possible opportunities to identify other similar issues. The sample results identified no additional items.

CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATIONS

The Assistant Plant Manager of Operations conducted crew stand-downs to discuss this event and its significance. The stand-downs included management expectations for observation of equipment

material condition during rounds and for procedure compliance. A key part of the stand-downs was a discussion of the specific control mechanisms for component manipulations.

Other WBN departments also conducted formal stand-downs with their personnel to discuss this event and its significance. The stand-downs included talking points similar to the Operations stand-downs. The stand-downs also included management expectations for procedural compliance.

Site Nuclear Assurance confirmed through a detailed survey that site personnel received the message from the Operations and other site department stand-down meetings. A very high percentage (>98.6%) of the persons sampled indicated they had received the message by responding correctly to six specific questions on management expectations.

Licensed personnel are involved in the observation of selected tests that have significant effects on components important to safety of the plant.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

With respect to the identified violation, TVA is currently in full compliance.