



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

John A. Scalice  
Site Vice President, Watts Bar Nuclear Plant

JUN 20 1997

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

Gentlemen:

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

WATTS BAR NUCLEAR PLANT (WBN) - UNIT 1 - NRC INSPECTION REPORT NO.  
390/97-02 - REPLY TO NOTICE OF VIOLATION

TVA has reviewed Inspection Report 50-390/97-02 dated May 22, 1997, which identified a severity level IV violation concerning configuration control. TVA's reply is provided in the enclosure. Additionally, the NRC report cover letter stated, in part, that "configuration control problems have persisted" at WBN. This letter will explain some of the corrective steps TVA has taken to address status control events overall, and progress made in this important area.

Previous to the event documented in the subject NOV, TVA had established a trend Problem Evaluation Report (PER) on status control events. As a result of our investigation, several site-wide corrective actions have been implemented to increase personnel awareness of the importance of maintaining the plant systems in the proper configuration at all times. These actions include detailed site-wide "stand-down" meetings to reinforce the management's expectations for attention to detail and adherence to procedures during job performance. These meetings discussed several status control events, their potential impact on safe operation, and the barriers that have been put in place to prevent the events from recurring. These barriers include pre- and post-job briefings to ensure the intent of the task is understood by the individuals involved and potential problems are identified.



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Barriers already in place that were reinforced in the stand-down meetings include the use of the STAR (stop-think-act-review) process to ensure the action to be taken is correct and the expected result is achieved, the use of peer checks to ensure the correct actions/manipulations are taken, and the proper use of second party and independent verification techniques.

In addition to the actions described above, WBN has installed a STAR simulator to provide hands-on training to individuals who perform status control manipulations. This simulator is being used for reinforcing attention to detail and both the need for and value of self-checking to ensure proper actions are taken in the correct sequence.

The corrective actions for the status control trend PER are currently being implemented. These actions have been effective. The frequency of status control events has trended downward over the past twelve months. The WBN management team monitors the effectiveness of the actions and evaluate the need to provide additional actions or revise existing ones to ensure continuing improvement in this area.

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

Sincerely,



J. A. Scalice

Enclosures

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cc (Enclosure):

NRC Resident Inspector  
Watts Bar Nuclear Plant  
1260 Nuclear Plant Road  
Spring City, Tennessee 37381

Mr. Robert E. Martin, 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  
Atlanta Federal Center  
61 Forsyth St., SW, Suite 23T85  
Atlanta, Georgia 30303

ENCLOSURE  
WATTS BAR NUCLEAR PLANT UNIT 1  
REPLY TO NOTICE OF VIOLATION  
390/97-02-01

NOTICE OF VIOLATION 50-390/97-02-01

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 operational alignment of safety-related equipment.

Watts Bar System Operation Instruction (SOI)-3.02, Auxiliary Feedwater System (AFW), Revision 21, Checklist 3, requires the status of isolation valve 1-ISV-3-828 to be open during normal operations. On March 27, the release of Clearance Sheet 1-97-003-0295 was authorized to lock open 1-ISV-3-828 in order to restore the system to a normal lineup.

Contrary to the above, as of March 28, 1997, 1A motor-driven auxiliary feedwater pump steam generator No. 1 level control valve isolation valve 1-ISV-3-828 was closed and was not tracked by any configuration control process for being out of its required position. Isolation of the No. 1 steam generator level control valve would have prevented the 1A motor-driven auxiliary feedwater pump from feeding the No. 1 steam generator during an accident.

TVA RESPONSE

TVA agrees that the subject violation occurred.

REASON FOR THE VIOLATION

The violation occurred due to personnel error. Isolation valve 1-ISV-3-828 was left in the "locked closed" position because both nuclear assistant unit operators (NAUOs) involved misread the required valve position on the clearance sheet. They discussed why the valve was to be left closed instead of normally open. Since they had been directed to check the 1A motor driven auxiliary feedwater pump for a test run, they incorrectly assumed the valve was left closed to prevent water intrusion into the steam generator.

CORRECTIVE ACTION TAKEN AND RESULTS ACHIEVED

Verification of the AFW system flow paths have been conducted and no other configuration problems were identified.

Other hold orders placed or released by the individuals involved in the subject event have been reviewed from discovery back to the first

day of their crew shift (March 27, 1997), and no additional configuration errors were identified.

Clearances involving safety-related system flow paths have been verified back to the beginning of the last outage (March 6, 1997), and no additional configuration problems were identified.

#### CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATIONS

Disciplinary actions have been taken against the two individuals directly involved in the event.

All available Operations personnel were required to attend "stand-down" meeting over the weekend after this event occurred. In addition, each individual crew was briefed on the stand-down meeting talking points dated April 1, 1997. The talking points discuss the subject event and similar issues, emphasizes improvement, and warn individuals of the disciplinary consequences of poor performance.

Similar stand-down meetings have been held with the Radiological Control, Chemistry, Maintenance, and Engineering groups.

Standing Order No. 97-007 has been issued to require that the pre/post clearance briefing checklist developed to improve clearance performance oversight for Senior Reactor Operators and Reactor Operators be continued since it has been a helpful tool for improving communications, understanding, and feedback with crew members.

Training has been provided to NAUOs concerning lessons learned (i.e., improper tagging, configuration type errors, and other problems) emphasizing the importance of properly handling clearances.

A memorandum from the Operations Superintendent was issued on April 2, 1997, to Work Week Managers, Shift Managers, and Shift Support Supervisors to endorse the concept of "limited schedule activities" 30 minutes prior to shift changeover.

A Policy Statement was issued by a memorandum from the Operations Superintendent to Operations personnel dated April 2, 1997. It discussed the subject event and its potential adverse impact on safety and emphasized accountability for work beginning and ending during or near shift changeover as follows:

Work beginning and ending during or close to shift change should not change the focus of the "task at hand." A rush attitude is not acceptable. This event shows the negative effects of such an attitude. Everyone is accountable for his or her actions and must be responsible for the safety of all personnel and nuclear safety issues.

#### DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

With regard to the subject violation, TVA is now in full compliance.