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DEC 16 1995

U.S. Nuclear Regulatory Commission
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Gentlemen:

In the Matter of) Docket No. 50-390
Tennessee Valley Authority) 50-391

WATTS BAR NUCLEAR PLANT (WBN) UNIT 1 AND 2 - REPLY TO A NOTICE OF VIOLATION - NRC INSPECTION REPORT 50-390/96-12 AND 50-391/96-12

The purpose of this letter is to provide a reply to a Notice of Violation (NOV) 50-390; 391/96-12-01. Violation 96-12-01 concerns the failure to properly compensate for the loss of alarms during a failure of both alarm stations and a failure to properly concur during an alarm transaction which resulted in a protected area alarm being out of service for approximately 36 hours. TVA's reply to this notice of violation is provided in Enclosure 1 of this letter. In addition to the enclosed violation response, the cover letter of the subject inspection report identified three additional items of concern. These items are discussed in Enclosure 1.

Enclosure 2 provides the list of commitments being tracked by this letter. If you should have any questions, please contact P. L. Pace at (423) 365-1824.

Sincerely,

J. A. Scalice for
J. A. Scalice

Enclosures
cc: See page 2

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cc (Enclosures):

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ENCLOSURE 1

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
REPLY TO NOTICE OF VIOLATION (NOV)
NOV 50-390; 391/96-12-01

DESCRIPTION OF VIOLATION 50-390; 391/96-12-01

"Paragraph 6.3, of the Physical Security Plan requires that each zone of the perimeter be provided with intrusion detection equipment.

Paragraph 6.3(C) of the Physical Security Plan requires that the protected and vital area access portals and emergency exit areas be locked from the outside and alarmed by balanced magnetic switches (BMS). These BMS will initiate an alarm at the Central Alarm Station and the Secondary Alarm Station.

Administrative Order 2.0, Central Alarm Station/Secondary Alarm Station Operations, paragraph 2.6, states that both alarm stations are equipped with a computerized alarm processing access control system. The alarm station operators will utilize this system to monitor the intrusion detection system devices on protected and vital areas. This system also provides automatic Closed Circuit Television surveillance of protected area barriers and protected area intrusion alarms.

Paragraph 2.2 of Administrative Order 2.0 requires the secondary Alarm Station operator to "monitor the security computer system which provides surveillance, intrusion detection, access control, and alarm processing functions for the protected and vital areas. In addition, the Secondary Alarm Station performs data entry, verification of specific computer commands, and facilitation of reports with the alarm station computer terminal."

EXAMPLE 1

"Contrary to the above, on September 28, 1996, the licensee failed to post the vital area doors during loss of the central/secondary alarm stations."

TVA RESPONSE - Example 1

TVA agrees that the violation example occurred.

REASON FOR VIOLATION

This violation example occurred because the Security Management failed to prepare a contingency plan which could meet the intent of the Physical Security Plan commitment to post each vital area door within 10 minutes on the loss of alarm annunciation capabilities. The security staff had not recognized that the loss of both the CAS and SAS could reasonably occur.

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CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

The Security Staff issued an instruction (Field Note) requiring notification of security management when there is a single computer failure to ensure that, if necessary, sufficient resources would be available to properly implement compensatory actions prior to attempting to restart the computer. A contingency plan was developed to meet the intent of the plan with the available resources. Practice drills have been performed to ensure that the plan could be met.

CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATIONS

A revision to the Physical Security and Contingency Plan has been issued to address catastrophic system failures and adequate compensatory measures for these system failures. Site procedures will be issued to implement the plan changes. TVA will submit the plan change to NRC under 10 CFR 50.54(p).

DATE WHEN IN FULL COMPLIANCE WILL BE ACHIEVED

The implementing site procedures discussed above will be completed by March 15, 1997.

EXAMPLE 2

"On September 29, 1996, while restoring the computer system, the licensee failed to verify that the proper zones were being removed from service resulting in a perimeter zone being unalarmed."

TVA RESPONSE - EXAMPLE 2

TVA agrees that the violation example occurred.

REASON FOR VIOLATION

This violation occurred because Security Management failed to provide procedural guidance and expectations for second party verification to the CAS/SAS operators for removing a system from service for maintenance. During the weekly functional tests on the perimeter intrusion detection system, it was discovered that one of the perimeter zones (Zone 25) would not alarm. Further investigation revealed that the alarm monitoring points that were disarmed the previous day for Zone 26A, were for Zone 25. The system was removed from service by verbal verification without validating the accuracy of input data.

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CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

The monitoring points for Zone 25 were reactivated, functionally tested, and returned to service. A security alert was declared because of the monitoring points being found off-line. Security personnel checked the vital area doors and protected area fence for indication of unauthorized entry or unauthorized personnel. The security alert was terminated upon completion of the search/inspection.

The Security Staff issued a Field Note to the CAS/SAS officers for verification responsibilities and methods to be used for validation of monitoring point changes. The CAS/SAS operators were trained on this note.

CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATIONS

The security Administrative Order (AO) 2.0, "Central Alarm Station/Secondary Alarm Station Operations" will be revised to define second party verification responsibilities. The overall security training program will be upgraded to clarify expectations and requirements for CAS/SAS attendants.

The security AO-2.16 "Security Equipment Maintenance and Testing" will be revised to require testing of affected alarm points when changes have been made to the security system database.

DATE WHEN IN FULL COMPLIANCE WILL BE ACHIEVED

The revision to the security administrative orders and training program above will be completed by February 15, 1997.

ADDITIONAL ITEMS ADDRESSED IN THE INSPECTION REPORT COVER LETTER

Item 1

"The central and secondary alarm station operations were not provided with procedures which delineate the required actions during security contingencies."

Actions Taken for Item 1

- See corrective action and recurrence controls for Example 1 above.
- This event prompted a review of other security procedures to ensure that contingencies for security events were adequately covered by the procedure. A team including an outside security procedure specialist, Nuclear Assurance, and Site Security personnel, was formed to assist in this effort. Recommendations

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were made to correct and enhance the procedures. Other general recommendations for program enhancements were also identified based on field observations and interviews. Overall, the assessment team concluded that the WBN Security Program can defend the plant against the design basis threat.

Item 2

"The security computer system needs to be evaluated to ensure that the installed equipment will not continue to fail resulting in the loss of both security alarm stations."

Actions Taken For Item 2

The loss of both alarm stations on September 28, 1996, occurred because of human error, not because of system failure. When the primary computer defaulted, the secondary computer instantly assumed the primary functions just as it was designed. A premature attempt to bring the failed unit back on line without determining the cause of the initial shutdown resulted in the loss of both computers. The computer system problems experienced, have not impacted both security computers simultaneously. However, these continuing problems must be addressed to ensure system reliability.

- A failed Ethernet transceiver was identified as the immediate cause of the computer failure. This transceiver was replaced.
- The computer system vendor was requested to send a technician to troubleshoot the system to determine the cause for the transceiver failure which caused the loss of one computer. The technician identified the apparent cause for the failure as an inadequate grounding of the Ethernet transceiver. The condition was corrected according to vendor specifications. Subsequent transceiver failures indicate that the previous condition may have impacted the other transceivers.
- The vendor has reevaluated and has determined that the installed transceivers are an older module (Revision A and B) that have previously had problems in other applications. A new transceiver module (Revision D) with improved resistance to floating voltage and heat problems has been supplied by the vendor. These new modules will be installed by December 31, 1996.

Item 3

"The protected area access control system needs management attention to ensure that personnel are not capable of tailgating into the protected area."

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Actions Taken for Item 3

- Security officers were posted at the turnstiles to ensure there was no unauthorized entry of personnel into the protected area.
- The alarm capabilities in the CAS/SAS for attempts to unlock multiple turnstiles, were activated in the alarm stations. By procedure, an officer is dispatched to investigate the alarm.
- In the long-term, TVA plans to implement the turnstile badgecard enable/disable capabilities of the system, which includes written procedures and training the officers on this feature. These long term actions will be completed by January 31, 1997.

ENCLOSURE 2

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COMMITMENT LIST

1. The Physical Security Plan implementing site procedures discussed in Example 1 will be completed by March 15, 1997.
2. The revision to the security administrative order, AO-2.0 and AO-2.16, and the upgrade to the security training program in Example 2 will be completed by February 15, 1997.
3. In the long-term, TVA plans to implement the turnstile badgecard enable/disable capabilities of the system, which includes written procedures and training the officers on this feature. These long-term actions will be completed by January 31, 1997.
4. A new transceiver module (Revision D) with improved resistance to floating voltage and heat problems has been supplied by the vendor. These new modules will be installed by December 31, 1996.