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John A. Scalice
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AUG 29 1996

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

Gentlemen:

In the Matter of)
Tennessee Valley Authority)

Docket No. 50-390

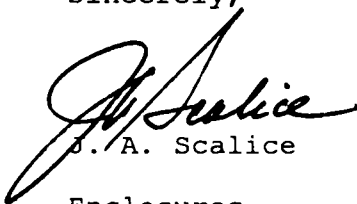
WATTS BAR NUCLEAR PLANT (WBN) - UNIT 1 - NRC INSPECTION REPORT NO.
50-390, 391/96-08 - REPLY TO NOTICE OF VIOLATION

The purpose of this letter is to provide a reply to Notice of Violation 50-390/96-08-03. This notice of violation identified two examples associated with the background count radiation and the control of vendor requirements. Enclosure 1 provides TVA's response. Enclosure 2 lists the commitments made in this letter.

A revised submittal date for this response was coordinated with the Region II staff on August 23 and August 26, 1996.

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

Sincerely,


J. A. Scalice

Enclosures
cc: See page 2

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cc (Enclosures):

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ENCLOSURE 1
WATTS BAR NUCLEAR PLANT UNIT 1
REPLY TO NOTICE OF VIOLATION (NOV)
NOV 50-390/96-08-03

NOTICE OF VIOLATION 50-390/96-08-03

"B. Technical Specification 5.7.1 requires, in part, that written procedures be established, implemented, and maintained covering the procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978, and the Offsite Dose Calculation Manual program detailed in Technical Specification 5.7.2.

Regulatory Guide 1.33 requires procedures for control of effluent radioactivity including liquid radioactive waste system sampling, monitoring, and discharging to limit materials released to environment and personnel exposure.

System Operating Instruction (SOI)-77.01, Liquid Waste Disposal, Revision 13, provides, in part, steps for release of liquid radioactive waste from a cask decontamination collector tank to the cooling tower blowdown.

Offsite Dose Instruction (ODI)-90-1, Liquid Radwaste Tank Release, Revision 6, provides, in part, steps for sampling, analyses, calculations, source checks, and setpoint changes required by the Offsite Dose Calculation Manual to perform liquid radioactive effluent releases via the cooling tower blowdown.

Contrary to the above:"

EXAMPLE 1

"For a June 10, 1996, cask decontamination collector tank release, licensee procedures were inadequate, in that, instruction ODI-90-1 did not require liquid effluent monitor 0-90-RE-122 background count rates to be validated prior to the release resulting in the establishment of nonconservative monitor setpoints."

TVA RESPONSE - EXAMPLE 1

TVA agrees that this violation example occurred.

REASON FOR THE VIOLATION

This violation example occurred due to inadequate procedures. Prior to June 11, 1996, background determinations were performed on Radiation Monitor (RM) 90-122 once per week for use in permits for the release of radiological waste. Performing the background determinations only once per week was considered adequate for this time period because the monitor was not being flushed after each release. SOI-77.01 is the procedure which controls radiological releases and it required that a work request (WR) be initiated to flush the monitor after each release. However, the WRs were not being properly prioritized to ensure the flush occurred before the next release and there was no procedural requirement to confirm that the flush had occurred.

CORRECTIVE ACTION AND RESULTS ACHIEVED

Change Notice (CN) 18 to Revision 13 of SOI-77.01 was approved on June 7, 1996. This revision became effective on June 11, 1996, and established guidelines which require that the monitor be flushed after each release. CN 21 to Revision 13 of SOI-77.01 also became effective on June 11, 1996, and requires that action be taken if the expected monitor response is not obtained during the release. Revision 7 to ODI-90-01 was approved and also became effective on June 11, 1996, and added guidelines which require that Section 6.2 of Technical Instruction (TI) 18, "Calculation Methods for Effluent Radiation Monitors," be implemented prior to each release so that the monitor background setpoint can be established.

CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATION

Radiation Monitor RM-90-225 is used to monitor releases from the Condensate Demineralized System. The requirements for the flushing of RM-90-225 and the establishment of the monitor background will be similar to those for RM-90-122 for releases which contain gamma emitting radionuclides. Therefore, appropriate provisions will be made to control these factors for monitor RM-90-225.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

TVA will complete the above action by September 30, 1996.

EXAMPLE 2

"Procedure SOI-77.01 did not require the sample flow rates to be verified resulting in a monitor sample flow rate which exceeded the ten gallon per minute limit specified in the vendor technical manual."

TVA RESPONSE - EXAMPLE 2

TVA agrees that this violation example occurred.

REASON FOR THE VIOLATION

This violation occurred due to an inadequate procedure which did not provide flow throttling requirements to maintain the flow less than 10 gpm. Vendor Manual WBN-VTD-G292-0130 specified guidelines to throttle the flow of the sample pump for radiation monitor 0-RM-90-122 to obtain a flow of 10 gpm. However, a specific reason why the vendor throttling requirements were not addressed in the system operating instruction could not be identified.

CORRECTIVE ACTION AND RESULTS ACHIEVED

Additional controls are being added to SOI-77-01 to ensure that the radiation monitor pump flow is throttled to the proper value at the initiation of each release. In addition, the Instrument Maintenance Instructions (IMIs) for the liquid effluent monitors were revised. The impacted IMIs consist of the following instructions and each instruction has been revised to incorporate the vendor's maximum flow requirements. The revision level of the instructions that incorporated the flow requirements are also tabulated below:

IMI	IMI Title	Applicable Revision
IMI-90-005	18 Month Flow Instrument Calibration of the General Atomic Dual Liquid Radiation Monitor Flow Loops	Revision 1, Change Notice 1
IMI-90-006	18 Month Flow Instrument Calibration of the General Atomic Liquid Radiation Monitor Flow Loops	Revision 2, Change Notice 2
IMI-90-007	92 Day Flow Instrument Calibration of the General Atomic Liquid Radiation Monitor, Flow Loop 0-LPR-90-122	Revision 2
IMI-90-008	92 Day General Atomic Liquid Monitor 0-LPR-90-212, Flow Instrument Calibration	Revision 1

In support of the revisions to the IMIs, Vendor Manual WBN-VTD-G292-0130 was revised to specify the method to adjust the flow rate. The Vendor Manual was also revised to specify a flow rate that was high enough to properly reset the low flow alarms but was within the maximum flow range defined by the vendor. The maximum flow value was determined to be $9.5 \pm .5$ gpm.

CORRECTIVE STEPS TO BE TAKEN TO AVOID FURTHER VIOLATIONS

The failure to properly control the vendor requirements was documented in the TVA corrective action program. In order to establish the extent of this condition, a review of corrective action documents which referenced vendor documentation was performed. Of the similar issues identified, improper control of vendor requirements since receipt of an operating license was not a programmatic concern. Therefore, it was concluded that this was a unique problem, limited to the incorporation of vendor requirements associated with the Radiation Monitoring System.

In order to assure that the vendor requirements which define flow limits for the radiation monitors are properly controlled, a review will be performed of the vendor requirements for the monitors required by the Technical Specifications and the Offsite Dose Calculation Manual (ODCM). This review will ensure, where specified, the vendor limits are controlled in applicable TVA documents.

During the development of the corrective action for the cited condition, several management issues regarding the timeliness and effectiveness of certain actions were identified. These issues are being addressed through the TVA corrective action program independent of the planned corrective action for this violation.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

TVA will complete the above actions by September 30, 1996.

Additional Issues Related to NOV 390/96-08-03

The discussion of NOV 390/96-08-03 in Inspection Report 390/96-08 contained the following three additional issues:

ISSUE 1

"In SOI-77.01, Section 8.1, Step 12, referred to a handswitch rather than the computer touch screen used by the auxiliary unit operator to initiate a pump required for release operations."

TVA RESPONSE

CN 21 to Revision 13 of SOI-77.01 became effective on June 11, 1996. This revision clarified the wording regarding operation of the computer touch screen, panel 0-L-725, to state; "START the selected CDCT pump (PNL-0-L-725)."

ISSUE 2

"In addition, a concern was identified for supplemental effluent release equipment in that the inspector identified the backup flowrate recorder (O-FR-77-42) specified in section 8.10.13 of SOI-77.01 to be inoperable."

TVA RESPONSE

Periodic Instruction (PI) 1-PI-OPS-1-RW, "Radwaste AUO Workstation Responsibilities, and Checksheet," was modified by CN 3 to Revision 2. This revision requires that the operability of chart recorders be checked once per shift.

ISSUE 3

"In addition, the AUO conducting the CDCT release did not maintain the waste permit documentation for review at the radwaste processing area, the operations shift supervisor was unaware that the release documentation was inappropriately being maintained in the MCR, and the operator observing and recording the 0-90-RE-122 monitor readings in the MCR was unaware of the differences between the documented background count and the actual monitor readings. Further discussions indicated that the operator documenting the 0-90-RE-122 responses in the MCR during the CDCT release was unaware of the basis for monitoring background determinations."

TVA RESPONSE

Once the June 10, 1996, release was initiated and it was observed that the count rate during the release was substantially less than the background, the release should have been halted until new setpoints were established. Resolution of this condition has been addressed by the corrective action developed for Example 1 of NOV 390/96-08-03. However, to ensure proper handling of the Release Permit during future releases, Change Notice 3 to Revision 14 of SOI-77.01 was issued on August 8, 1996, and added controls which state: "The Release Permit shall remain at the radwaste processing station (Aux Bldg, el. 692, PNL-O-L-2) or within the possession of the person performing the release. Shift turnover may require relieving on station." In addition, during the last operator requalification cycle, the Assistant Unit Operators (AUOs) received training entitled "Effluent Release Packages." This training was provided to enhance skills required for proper performance of effluent releases.

ENCLOSURE 2

COMMITMENT SUMMARY

1. Additional controls are being added to SOI-77-01 to ensure that the radiation monitor pump flow is throttled to the proper value at the initiation of each release.
2. In order to assure that the vendor requirements which define flow limits for the radiation monitors are properly controlled, a review will be performed of the vendor requirements for the monitors required by Technical Specifications and the Offsite Dose Calculation Manual (ODCM). This review will ensure, where specified, the vendor limits are controlled in applicable TVA documents.
3. Radiation Monitor RM-90-225 is used to monitor releases from the Condensate Demineralized System. The requirements for the flushing of RM-90-225 and the establishment of the monitor background will be similar to those for RM-90-122 for releases which contain gamma emitting radionuclides. Therefore, appropriate provisions will be made to control these factors for monitor RM-90-225.