

TENNESSEE VALLEY AUTHORITY

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NOV 20 1990

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

Gentlemen:

In the Matter of the Application of)
Tennessee Valley Authority)

Docket Nos. 50-390
50-391

WATTS BAR NUCLEAR PLANT (WBN) - REPLY TO NOTICE OF VIOLATION 390/90-19-01

TVA has reviewed the two examples of the notice of violation transmitted by letter to Oliver D. Kingsley, Jr., from Bruce A. Wilson dated October 15, 1990. In accordance with 10 CFR 2.201, enclosed is TVA's response to the notice of violation. The delay in providing this response was discussed with Region II staff on November 14 and 16, 1990.

If there are any questions, please telephone P. L. Pace at (615) 365-1824.

Very truly yours,

TENNESSEE VALLEY AUTHORITY



M. O. Medford, Vice President
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and Fuels

Enclosure
cc: See page 2

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U.S. Nuclear Regulatory Commission

NOV 20 1990

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ENCLOSURE
REPLY TO NOTICE OF VIOLATION
390/90-19-01

Description of Violation (Example 1)

Part 50 of Title 10 of the Code of Federal Regulations, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requires, in part, that activities affecting quality, ". . . shall be accomplished in accordance with instructions, procedures, and drawings," and that these instructions, procedures, and drawings, ". . . shall include appropriate quantitative and qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

Procedure AI-1.8, "Plant Housekeeping," Revision 36, Section 6.5, Step 6.5.8 requires that the licensee implement Technical Instruction (TI)-27, "Cleaning and Cleanliness of Fluid Systems and Components," Revision 28. Section 5.0, Parts A, B, and C require that cleanliness controls be established to prevent the degradation of systems and components when work activities may adversely affect system cleanliness.

Contrary to the above, during work activities (Workplan KPO 4335A-1) associated with the sandblasting and repainting of the Unit 1 condensate storage tank (CST), the licensee failed to cover the suction pipes to the Auxiliary Feedwater System. Failure to adequately isolate the suction pipe allowed sandblast material to become entrained in this section of the line, thereby creating a potential condition adverse to system operability and system design.

Admission or Denial of the Violation (Example 1)

TVA admits the violation occurred as stated.

Reason for the Violation (Example 1)

The reason for the violation was less than adequate preparation and review of Workplan K-P04335A-1 (Revision 0) and inattention to detail by the performers of Workplan K-P04335A-1 (Revision 1).¹ This resulted in a failure to provide appropriate cleanliness controls for the sandblasting activity and hence failure to protect suction piping.

During preparation and review of Workplan K-P04335A-1 (prior to its performance), the requirements of Administrative Instruction (AI)-1.8 were only partially addressed. Although the workplan included a requirement for the painter foreman to perform housekeeping inspections in accordance with AI-1.8, the failure to consider the requirements of TI-27, Part III, as required by AI-1.8 resulted in the lack of specific workplan instructions to protect CST suction piping from sandblasting material. Contributing to this oversight was a focus by involved personnel on providing protection (wrapping) to numerous stainless steel nitrogen sparging lines/nozzles inside the CST. A specific instruction relating to protection of these lines was added to the workplan replacing a previous instruction step which required general protection of equipment during sandblasting.

1. Workplan K-P04335A-1 was revised prior to performance of any work.

The specific causes of the violation are (1) failure by the preparer of Workplan K-P04335A-1 (Revision 0) to be aware of the specific cleanliness controls imposed by TI-27 Part III, step 5.1, (2) failure by the primary reviewer (qualified in the civil discipline) of Workplan K-P04335A-1 (Revision 0) to realize the workplan should be reviewed by the mechanical discipline, and (3) inattention to detail by the preparers and performers of the workplan.

Corrective Steps Taken and Results Achieved (Example 1)

It has been determined that the area of sand contamination was maintained within the hold order boundary and that sand only contaminated the first few feet of three pipes that entered the tank. The piping was sealed off to prevent further contamination. The workplan was revised to add cleaning of the piping systems to ensure and document that no sand contamination will get into the remainder of plant system piping.

To address the oversight regarding AI-1.8 and TI-27 requirements, TI-27 Part III was added to the required reading list for civil engineering personnel who prepare workplans. Also, all construction civil engineering supervisors and/or their designees were directed to discuss with their personnel the importance of fully addressing requirements of AI-1.8 and TI-27 Part III when writing workplans. This condition was considered to be an isolated case as the preparer and reviewer of Workplan K-P04335A-1 have not generally been involved with preparation or review of workplans dealing with fluid system modifications which would be subject to cleanliness controls of TI-27 Part III.

To address the workplan review issue, senior construction management directed construction engineering managers (Mechanical, Electrical, etc.) to discuss with Nuclear Construction (NC) qualified reviewers the importance of the Independent Qualified Review (IQR) Program including appropriate consideration of the need for cross-disciplinary reviews.

Additionally, NC issued a memorandum to involved personnel stressing that care and precautions shall be taken to prevent possible damage to existing plant features or equipment during any modifications.

Corrective Steps Which Will Be Taken to Avoid Further Violation (Example 1)

TVA considers the above actions appropriate for prevention of the specific violation. Additionally, TVA believes the actions planned or taken under the WBN Quality and Productivity Improvement² Program will decrease the likelihood of the violation's recurrence. Specifically, the program provides for increased attention in the area of job planning (including adequacy of workplan instructions), craft retraining, and housekeeping.

Date When Full Compliance Will Be Achieved (Example 1)

WBN is presently in compliance.

2. Letter from NRC (B. A. Wilson) to TVA (O. D. Kingsley), "Summary of October 22, 1990 TVA/NRC Meeting on Watts Bar, November 1, 1990."

Description of Violation (Example 2)

Part 50 of Title 10 of the Code of Federal Regulations, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requires, in part, that activities affecting quality, ". . . shall be accomplished in accordance with instructions, procedures, and drawings," and that these instructions, procedures, and drawings, ". . . shall include appropriate quantitative and qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

Procedure AI-2.8.15, "Corrective Action - WBN," Revision 0, specifies requirements for closing CAQs in Section 3.3, "Administering Corrective Action," Section 3.5, "Closing CAQs," and Section 3.7, "Processing Problem Reporting Documents." Section 3.5 states "Close non-CAQs, or CAQs that are the same CAQ documented on an existing CAQR, PRD, or ACP with a written detailed justification (including the identification number of the existing CAQ document)."

Contrary to the above, the licensee superseded (cancelled) potential CAQ (WBP 900303) which required specific corrective actions to fix an identified adverse condition, prior to incorporating those corrective actions into an Administrative Control Procedure (Workplan). The licensee determined that the foreign material in the Auxiliary Feedwater System (sandblast material) would necessitate the removal and flushing of portions of the system to correct this condition. To accomplish this, the licensee determined that this activity could be conducted under control of their Workplan Administrative Control Procedure, as allowed in AI-2.8.15, Section 3.5. However, the licensee failed to incorporate the corrective actions in the workplan before superseding the CAQ.

Admission or Denial of the Violation (Example 2)

TVA admits the violation occurred as stated.

Reason for the Violation (Example 2)

The reason for the violation is error by Corrective Action Management Review Committee (MRC) representatives.

Corrective Steps Taken and Results Achieved (Example 2)

Problem Reporting Document (PRD) WBP 900303P was reopened to document the inadequacy of the workplan associated with the Auxiliary Feedwater (AFW) System cleanliness deficiency. The workplan corrective action steps were revised to include cleaning of the AFW System piping to correct the deficiency.

In addition, the two MRC representatives involved in approving the inappropriate closure of WBP 900303P have been made aware of the error, and the issue was further discussed in a subsequent MRC meeting.

TVA has also completed a sample review of other closed CAQ documents to determine the extent of condition. The review determined this inappropriate closure of a CAQ document to be an isolated case.

Corrective Steps Which Will Be Taken to Avoid Further Violation (Example 2)

Since this inappropriate CAQ document closure was determined to be an isolated case of personnel error and the involved personnel have been made aware of the error, no further preventive action is required.

Date When Full Compliance Will Be Achieved (Example 2)

TVA is now in full compliance with respect to this example of violation.