



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

NOV 11 1994

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

Gentlemen:

In the Matter of the Application of) Docket Nos. 50-390
Tennessee Valley Authority) 50-391

WATTS BAR NUCLEAR PLANT (WBN) - UNITS 1 AND 2 - NRC INSPECTION REPORT NO.
50-390, 391/94-37 - REPLY TO NOTICE OF VIOLATION (NOV) (EXAMPLES 2 AND 7)

The purpose of this letter is to provide a response to Examples 2 and 7 of Violation 50-390, 391/94-37-01 (Enclosure 1). TVA's response to the other examples of this NOV was provided by letter dated October 18, 1994. TVA management has reviewed the recent Nuclear Assurance corrective action program audit findings and directed an overall assessment of the inspection report issues be performed. Enclosure 2 provides a discussion of these actions. Enclosure 3 contains a list of commitments made in this letter.

TVA has notified NRC Region II of the delay in submitting this response. If you should have any questions, contact P. L. Pace at (615)-365-1824.

Sincerely,

Dwight E. Nunn
Vice President
New Plant Completion
Watts Bar Nuclear Plant

Enclosures
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cc (Enclosures):

NRC Resident Inspector
Watts Bar Nuclear Plant
Rt. 2, Box 700
Spring City, Tennessee 37381

Mr. P. S. Tam, 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
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

ENCLOSURE 1

WATTS BAR NUCLEAR PLANT UNIT 1
REPLY TO NOTICE OF VIOLATION
NRC SEPTEMBER 12, 1994, LETTER TO TVA
NRC VIOLATION 50-390/94-37-01

"10 CFR 50, Appendix B, Criterion V, Instructions, Procedures, and Drawings, requires that activities affecting quality be prescribed by documented instructions or procedures and be accomplished in accordance with these instructions or procedures.

TVA Nuclear Quality Assurance (QA) Plan TVA-NQA-PLN89-A, Revision 4, Section 6.1, requires that quality-related activities be prescribed by documented procedures and instructions appropriate to the circumstances. Activities shall be accomplished in accordance with these procedures and instructions.

Contrary to the above, the following examples of failure to follow procedures were identified:"

EXAMPLE 2

"Appendix G of Startup Manual Procedure (SMP)-14.0, Test Deficiencies, Revision 2, states in part that initiating a Problem Evaluation Report (PER) to evaluate conditions identified in a Test Deficiency Notice (TDN).

- PERs were not written as a result of deficiencies identified DN-01 for CSI 108212104E02000, TDN 93-0061, TDN 94-0086, TDN 94-0947, and TDN 94-1038 in as required by Procedure SMP-14.0. These test deficiencies were all written to resolve wiring installation errors."

TVA RESPONSE - Example 2

TVA denies this violation example.

BASIS FOR THE DENIAL - Example 2

TVA has determined that the TDNs did not meet the PER initiation criteria as described in SMP-14.0, in effect at the time that these TDNs were issued. SMP-14.0 required that a PER be generated by fulfilling any one of the following four criteria: 1) TDNs having programmatic Startup implications; 2) conditions where testing results in plant equipment damage or loss of control of a system; 3) incomplete construction of a substantial nature after turnover of a system to Startup; or 4) engineering or construction errors of a substantial nature.

None of the identified TDNs, when reviewed against the above PER criteria, could be considered a construction error of a substantial nature as discussed in the violation example. Because of the wide scope of the component and preoperational testing conducted under the Startup Manual, the test deficiency notice was considered an appropriate administrative control program for wiring

errors and other similar construction deficiencies. Each TDN was required to be corrected, trended for feedback to line organizations, evaluated for significance (using Significant Corrective Action Report (SCAR) criteria) and evaluated for reportability under 10 CFR 50.55(e).

The level of control in the TDN process is sufficient for items found during initial testing; it would not be appropriate to document similar errors found after the test program was completed. This issue is clouded by the unclear status of the 1991 corrective action "lessons learned" site dispatch regarding management's guidance on PER initiation. Although TVA never made a docketed commitment to this guidance, it was included in NRC's restart review (Inspection Report 91-29). When the TDN process under the startup manual was established, the program was based on the appropriate controls needed for test deficiencies. For these reasons, TVA denies this violation example.

To ensure that this issue is properly addressed and to provide clear, procedurally controlled, guidance on PER initiation criteria for the administrative control programs, a task force of experienced TVA managers established guidelines for PER initiation and reviewed each applicable program against them. The results of this review are being added to Site Standard Practice (SSP)-3.04, "Corrective Action Program," scheduled for completion by November 30, 1994. These guidelines supersede all previous guidance on PER initiation.

For Test Deficiency Notices, the PER attributes are:

1. Extent of Condition: PER initiation is not normally required due to the broad scope of the test program. Individual deficiencies are entered into the trend program. A PER is issued if a trend is identified.
2. Programmatic Problem: TDNs are reviewed against SCAR criteria for significant programmatic problems. PERs are required where the TDNs identify programmatic problems with the testing process.
3. Procedure Adherence: PERs would not be required if test procedure adherence issues were corrected through the TDN process itself. Trending of procedure adherence issues provides sufficient management control of the overall issue.
4. Use-as-is Disposition: Technical disposition of TDNs which document nonconformances to design documentation can only be dispositioned by engineering design output documentation, therefore, PER generation is not required.
5. Generic Review Required: PERs are required when a deficiency that would not be detected in a normal startup or surveillance program could be applicable to another TVA station.
6. Installation/design/human errors: This guideline is considered primarily for reportability purposes. Because each TDN is screened for 10 CFR 50.55(e) reportability, PERs are not required.
7. Operability: PERs are required when a deficiency is identified that would not be detected in a normal startup or surveillance program and could affect operability of an operating TVA facility.

8. Vendor Related Conditions: This is also a reportability/operability issue. PERs would be generated under those issues.

Of course, management judgement is the primary means for determining when PERs should be written. TVA expects its line managers to be sensitive to conditions which do not fit specific criteria and to take conservative actions as necessary.

TVA has also conducted a review of the five referenced TDNs with the following results:

DN-01 (GTE XXX-02, CSI 1082A2104E02000), TDN 93-0061, and TDN 94-0947 - These deficiencies involved wiring errors in the diesel generator air pressure switch circuits. Each had been corrected under its respective generic test procedure using drawings from DCN 12839-A.

TDN 94-0086 - This deficiency involved a main control room switch and indicating lights wiring errors which were corrected by work order 94-02885-00.

TDN 94-1038 - This deficiency involved an indicating light wiring error for an 866A lockout relay and was corrected per the TDN troubleshooting log.

These deficiencies were evaluated for reportability and were considered in the trending program as required by startup manual procedures. Based on the assigned acceptable quality levels (AQLs) and distribution of these and other wiring errors over the different trend reporting periods, no adverse trend was confirmed.

In addition to the above, TVA has revised SMP-14.0 to provide guidance to field personnel when faced with situations in which they recognize a pattern of errors developing or the existence of other unusual circumstances.

EXAMPLE 7

"Appendix EE of Procedure SSP-6.02, Maintenance Management Systems, Revision 13, states that a PER or SCAR is to be initiated if an identified safety-related deficiency involves a procedure adherence problem, an installation error, design deficiency, or human error, or if an extent of condition is needed.

Appendix G of Procedure SMP-14.0, Test Deficiencies, Revision 2, states that a PER must be generated in addition to a TDN when there is an engineering or construction error of a substantial nature.

On June 6, 1994, PER WBP940303, which documented that flow transmitter 1-FT-62-93C had been installed with the high- and low-pressure sensing lines reversed, was invalidated and another PER was not reissued for this installation/construction error. The PER was invalidated by the Senior Management Review Group (SMRG) citing that the condition would be more appropriately resolved by previously issued TDN-94-0943 and Work Request (WR) C232843."

TVA RESPONSE - Example 7

TVA denies this violation example.

BASIS FOR THE DENIAL - Example 7

As with Example 2, this issue occurred because the program established for TDNs is appropriate for test activities, but was inconsistent with the management guidance on PER initiation established in a 1991 internal TVA site dispatch. The original site guidance, and in particular, the installation error guidance, had been included in plant procedure SSP-6.02. The PER guidelines reflect the expectation that installation errors may be routinely identified during the startup program. Although TDN 94-0943, involving the installation error described in this example, did not meet the PER criteria, when work request (WR) C252843 was generated in accordance with SSP-6.02, the PER criteria of that document became applicable.

Once generated and under management review, PER disposition is controlled by SSP-3.06, "Problem Evaluation Reports," not by the SSP-6.02 requirements for initiation. The Senior Management Review Committee (SMRC) review on June 6, 1994, agreed to the validity of the condition identified in this PER, but determined that the test deficiency notice process was the preferred administrative control program for use in resolving this issue. TDN 94-0943, which also identified this issue, had not been completed and work request C252843 had been issued to implement correction of the sense line deficiency.

In the inspection report, NRC stated their interpretation of the SMP-14.0 criteria on errors of a substantial nature as "... the installation of hardware in a configuration other than that reflected in design output documents, such that the hardware does not perform its intended function, and that this erroneous installation was inspected and accepted by QC, constituted a 'substantial' adverse condition."

TVA agrees that this is a workable definition for a system on which testing has been completed. However, for a system or component not yet tested, and therefore, not counted upon to satisfy a safety function, this criteria is inappropriate.

These current TDN guidelines were established in response to wiring and installation errors that were known to exist in the plant. TVA's commitment to reperform pre-operational testing for Unit 1 was established, in large part, to confirm that these past errors were corrected. For these reasons, TVA denies this violation example.

However, as discussed in Example 2, the TDN process for PER initiation is being clarified. In addition, SMRC will review the revisions of SSP-3.04 and the administrative control programs (ACPs) as part of the site's continuing procedure familiarization program.

ENCLOSURE 2

WATTS BAR NUCLEAR PLANT UNIT 1
DISCUSSION OF TVA MANAGEMENT ASSESSMENT
OF THE INSPECTION REPORT ISSUES
AND THE
NUCLEAR ASSURANCE AUDIT FINDINGS

As discussed in previous responses to Inspection Reports 94-13 and 94-37, several corrective actions were put in place through Significant Corrective Action Report WBSA940033 to improve performance in the WBN Corrective Action Program. To assess the effectiveness of those corrective actions, TVA Nuclear Assurance conducted Audit SSA944409 to review corrective action documents closed between August 15 and September 15, 1994.

The team concluded that overall improvement had been achieved; however, the effectiveness of the management actions had not been fully realized. Additional actions were considered necessary to achieve full compliance.

Like the issues identified in Inspection Report 94-37, the predominant types of discrepancies identified in the audit included root causes which were not identified, corrective actions and recurrence controls that did not always focus on the identified problem or root causes, and extent of condition analyses that were not thorough.

To address the audit findings, WBN has added the specific CAQ concerns to SCAR 940033. Management's review of the violations, SCAR, and the recent audit has pointed out the need for a more thorough evaluation of the causes of the program implementation problems. Accordingly, a multi-discipline team is being formed to reevaluate root causes of these implementation problems. Based on the results of that analysis, the team will determine any additional recurrence control and corrective actions required. The team will also assist in the implementation and closure process for corrective actions. This review and development of additional actions will be included in SCAR 940033.

As an interim measure, the Senior Management Review Committee and Nuclear Assurance will continue to review CAP closures and provide feedback to line organizations until TVA management has assurance that management expectations are being achieved.

ENCLOSURE 3

WATTS BAR NUCLEAR PLANT UNIT 1
LIST OF COMMITMENTS

1. The results of this review are being added to SSP-3.04, "Corrective Action Program," to document the applicable criteria; scheduled for completion by November 30, 1994. These guidelines supersede all previous guidance on PER initiation (including the 1991 site dispatch). (Example 2)
2. SMRC will review the revisions of SSP-3.04 and the ACPs as part of the site's continuing procedure familiarization program. (Example 7)
3. A multi-discipline team is being formed to reevaluate root causes of these implementation problems. Based on the results of that analysis, the team will determine any additional recurrence control and corrective actions required. The team will also assist in the implementation and closure process for corrective actions. This review and development of additional actions will be included in SCAR 940033. (Enclosure 2)
4. As an interim measure, the Senior Management Review Committee and Nuclear Assurance will continue to review CAP closures and provide feedback to line organizations until TVA management has assurance that management expectations are being achieved. (Enclosure 2)