



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

John H. Garrity
Vice President, Watts Bar Nuclear Plant

NOV 08 1991

WBRD-50-390/91-23
WBRD-50-391/91-23

10 CFR 50.55(e)

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) UNITS 1 AND 2 - CORRECTIVE ACTION PROGRAM -
WBRD-50-390/91-23 AND WBRD-50-391/91-23 - FINAL REPORT

The subject deficiency was initially reported to Region II on May 8, 1991, in accordance with 10 CFR 50.55(e) as Significant Corrective Action Report (SCAR) WBSA 910212. As discussed with the Region II Staff, this deficiency addresses the same issues as apparent Notice of Violation 50-390, 391/90-31-01 and many of the same issues identified in Notice of Violation 50-390, 391/90-27-01. On June 7, 1991, TVA submitted an interim report to NRC.

The enclosure contains TVA's final report for SCAR WBSA 910212. No new commitments are being made by this letter.

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

Sincerely,


John H. Garrity

Enclosure
cc: See page 2

911180305 911108
PDR ADDCK 05000390
S PDR

Handwritten initials/signature

NOV 08 1991

U.S. Nuclear Regulatory Commission

cc (Enclosure):

INPO Record Center
1100 Circle 75 Parkway, Suite 1500
Atlanta, Georgia 30339

NRC Resident Inspector
Watts Bar Nuclear Plant
P.O. 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

Mr. B. A. Wilson, Chief, Project Chief
U.S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

ENCLOSURE

WATTS BAR NUCLEAR PLANT (WBN)
CORRECTIVE ACTION PROGRAM
SIGNIFICANT CORRECTIVE ACTION REPORT
(SCAR) WBSA 910212
WBRD-50-390/91-23 AND WBRD-50-391/91-23
FINAL REPORT

DESCRIPTION OF DEFICIENCY

Based on a review of corrective action documents generated from 1987 through 1990, NRC Inspection Report 50-390, 391/90-31 identified an apparent violation for TVA's failure to establish and implement an adequate corrective action program. The five areas of weakness cited are listed below:

1. Failure to take timely action to determine the scope and significance of identified corrective actions.
2. Failures to adequately establish and implement criteria for Condition Adverse to Quality Report (CAQR) initiation.
3. Failures to identify and appropriately address recurrent and programmatic deficiencies requiring more extensive corrective actions.
4. Inadequate corrective actions focusing too narrowly on the specific issue and not addressing the cause or full extent of the adverse condition.
5. Inadequate or improper closures of CAQRs or Problem Reporting Documents (PRDs).

SAFETY IMPLICATIONS

The potential exists for an inadequately implemented corrective action program to permit technical issues associated with safety-related structures, systems, or components to remain unresolved. Therefore, the safe operation of the plant could be affected adversely by these deficiencies if left uncorrected.

ROOT CAUSE

The root cause for the subject deficiency was lack of management attention and accountability for the corrective action program. Job performance and professional standards were not adequately defined or enforced. Additionally, extensive changes in personnel, organizations, and management systems took place without being well controlled and managed to assure the desired results were achieved. A contributing cause was that management did not adequately address known problems with the corrective action program.

CORRECTIVE ACTIONS

Many of the historical problems associated with WBN's corrective action programs were the result of management's failure to devote sufficient attention to the corrective action process. Because there was a lack of emphasis placed upon the prompt and effective identification and resolution of problems, line organizations fell into a practice of conducting lengthy investigations with inadequate analysis. With insufficient emphasis placed upon the adequacy and completion of corrective action plans and the adequacy of closure of corrective action documents, some problems were allowed to remain uncorrected for an unacceptable length of time.

To correct these problems, WBN has implemented wide-ranging improvements that include the following:

1. In order to focus upper-management attention on the corrective action process, the management review committee charter has been revised to include members of senior management from site organizations. This committee is made up of senior managers and alternates approved by the Site Vice President that are required to review significant corrective action documents. The committee charter places specific emphasis on technical aspects of corrective action such as adequacy of corrective action, 10 CFR 50.55(e) reportability, adequacy of preventive actions, and effects on nuclear safety and operation of the plant and plant equipment. The Senior Management Review Committee (SMRC) will continue at this level of oversight until it is confident the WBN corrective action program consistently meets management expectations.

In addition, to promote senior management attention, the corrective action procedure, Site Standard Practice (SSP)-3.04, "Corrective Action Program," requires that a senior manager reporting directly to the Site Vice President sign Significant Corrective Action Reports (SCARs) for approval of the developed corrective action. These SCARs identify significant adverse conditions according to corrective action procedure SSP-3.04. This provides additional problem solving experience and management attention for corrective actions and the corrective action process.

2. The Quality Assurance (QA) organization is currently performing reviews of SCARs after initiation and also before closure. QA review provides feedback on the adequacy of the proposed corrective action and the completed corrective action before closure. Comments from both of these reviews are fed back to the responsible organizations.
3. To allow the senior site management to better monitor the corrective action program, process work off curves and timeliness performance goals have been established for each organization. These are reviewed by the Site Vice President on a monthly basis.

4. QA has implemented a "12-6-3 review" of SCARs and Problem Evaluation Reports (PERs) on approximately a monthly basis. PERs describe discrepancies or problems which are outside the scope of any other administrative control program (ACP). An employee would use a PER when not sure about how to document the problem. The 12-6-3 review examines 12 SCARs/PERs from a horizontal perspective (one QA program element); 6 SCARs/PERs are reviewed from a vertical perspective (entire process), seeking root causes, and to determine adequacy of corrective action; and 3 closed SCARs/PERs are selected and reviewed to assess the effectiveness of the corrective action in preventing recurrence of the identified problem. The frequency of these reviews will be adjusted to be commensurate with the level of performance being achieved.

In addition to these improvements, TVA has implemented enhanced requirements in Nuclear Power Standard (STD)-3.4, "Corrective Action." This standard represents a program which was presented to NRC on December 12, 1990, at the Region II headquarters in Atlanta, Georgia. This revised program has several improvements over previous programs, in that, it will address NRC's concerns about the implementation of WBN's corrective action program and should prevent recurrence of past deficiencies.

With implementation of Nuclear Power Standard STD-3.4, the corrective action process has been simplified and strengthened in the following ways:

1. PRDs and nonsignificant CAQRs have been eliminated and replaced by the PER. The PER form is easier to generate than the PRD and addresses reportability, operability, generic review, and extent of condition, providing assurance that significant conditions will not be overlooked. The new program also requires that when the employee is not sure in which program to document the problem, it shall be documented on a PER to initiate timely attention to operability, reportability, and corrective action.

By differentiating problems according to their significance, management attention is more focused to ensure prompt correction of important issues.

2. Four existing conditions adverse to quality procedures (Administrative Instruction [AI]-2.8.3, AI-2.8.5, AI-2.8.14, and AI-2.8.15) were initially consolidated into AI-2.8.15, significantly reducing the complexity of the corrective action program. AI-2.8.15 was replaced by SSP-3.04 as part of TVA's recent procedures upgrade program.
3. The types of problems that can be dispositioned by the ACPs have been standardized for TVA sites. The ACPs include those programs that can identify adverse conditions that do not meet the significance level of a SCAR (e.g., drawing deficiencies, maintenance requests, quality control inspection reports).

4. The current ACP program ensures that key elements of the corrective action program are incorporated within each ACP when required. These key elements include a review for potential reportability, generic applicability, and trending. In addition, by standardizing the ACPs, TVA ensures a total integration of corrective action program elements into a cohesive and comprehensive program.
5. Instruction on the revised program was developed and presented to appropriate WBN employees. Expanded instruction also has been given to supervisors and managers, with emphasis on timeliness of reporting problems, appropriate corrective actions, extent-of-condition review, and adequate verification of closure. Indoctrination of new personnel to the program is provided through the General Employee Training program.

Additionally, TVA has performed a statistical sample of closed corrective action reports (60 CAQRs and 60 PRDs) in an effort to identify issues similar to those identified by NRC in its inspection. The scope of this review included those reports closed between March 1987 and February 1991. The attribute list for the review included: (1) identification of deficiencies as programmatic or recurring; (2) adequate extent of condition review, appropriate corrective action, and root cause; and (3) proper closure of CAQs. Other attributes considered on the checklist were: (4) did the condition represent an equipment problem; and (5) did a potential safety significant condition exist? The results of this review identified additional examples of problems in the closure of CAQ reports, most of which were associated with missing documentation. However, further evaluation determined that none of the examples identified would have an adverse affect on the safety of the plant if left uncorrected. CAQs exhibiting problems as a result of this statistical sample have been corrected.