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AUG 20 1993

U.S. Nuclear Regulatory Commission
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Gentlemen:

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

WATTS BAR NUCLEAR PLANT (WBN) - RESPONSE TO NRC INSPECTION REPORT 50-390, 391/93-24 AND THE JUNE 24, 1993, NRC LETTER CONCERNING NOTICE OF VIOLATION 50-390, 391/93-24-01

The purpose of this letter is twofold. First, TVA is providing a written response to NRC Inspection Report 50-390, 391/93-24 which asked TVA to provide a discussion concerning reaffirmation of the CATD Program and the tracking of Class C concerns to resolution at WBN. These issues were discussed with NRC Region II personnel in meetings held on June 18, August 6, and August 10, 1993. The results of these meetings are reflected in the TVA discussion.

Second, TVA is providing a reply to the June 24, 1993, NRC letter concerning TVA's response to Notice of Violation 50-390, 391/93-24-01.

Enclosure 1 contains a discussion concerning the above subjects. Enclosure 2 contains a list of commitments made in this submittal.

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

Very truly yours,

William J. Muesler

Enclosures
cc: See page 2

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ENCLOSURE 1

NRC INSPECTION REPORT 50-390, 391/93-24

NRC Inspection Report 50-390, 391/93-24 asked that a discussion be provided about how TVA intends to reaffirm the adequacy of the Corrective Action Tracking Document (CATD) resolution program and track Class C employee concerns to resolution at WBN. These issues were discussed with NRC Region II staff personnel during meetings held on June 18, August 6, and August 10, 1993. This enclosure will satisfy the NRC original request.

It is important to recognize that the Employee Concerns Special Program (ECSP) has been operating since 1985 to address approximately 6,000 concerns expressed mainly by WBN employees prior to February 1, 1986. The ECSP is a proceduralized and structured program that has operated with substantial external oversight. NRC letter dated October 6, 1987, stated that the ECSP contained acceptable procedures and guidelines to evaluate and provide corrective actions for those concerns within its scope. In addition, TVA submitted 107 subcategory reports, 9 category reports, and the ECSP final report to NRC on February 6, 1989. These reports summarized the concerns and provided the basis for closing out those which had not been previously addressed.

A critical part of the ECSP process involved the classification of the various pre-February 1986 concerns. Each concern was evaluated and determined to be either not substantiated (Class A), not a problem requiring action (Class B), a problem already being addressed by line management prior to the evaluation (Class C), a problem requiring corrective action (Class D), or a problem raised during the course of the evaluation (Class E). As a result of this evaluation, over three-fourths of the nearly 6,000 concerns fell into the A, B, and C classifications. For the remainder of Class D and E concerns, specific corrective action plans were prepared and CATDs were established to maintain an accounting of and control over the corrective action plans.

CATD Reaffirmation

NRC's first concern arose as a result of its review of 39 CATD closure packages during Inspection 50-390, 391/93-24. NRC concluded that 8 packages contained deficiencies, 4 of which failed to resolve the technical concern they addressed. In earlier inspections at WBN, NRC identified deficiencies in 8 additional CATD closure packages. NRC characterized 2 of these 8 as failing to resolve the technical concern. While TVA does not agree fully with the NRC characterization of each individual closure package, TVA agrees that there were unresolved technical issues and closure issues within the CATD closure packages reviewed by NRC.

After examining the deficiencies noted by NRC, TVA concludes that they do not cast doubt upon the overall adequacy of the CATD resolution process.

NRC has conducted numerous inspections of the CATD closure process in the recent past with satisfactory results. NRC Inspection Reports 50-390, 391/91-19, 92-43, 93-06, 93-16, as well as the current Inspection Report 50-390, 391/93-24, each provided overall positive results. While deficiencies were noted in some CATD closure packages, no violations or deviations, other than Notice of Violation 50-390, 391/93-24-01, were identified by NRC during any of these inspections. Further, each NRC inspection report concluded that corrective actions were being effectively carried out.

Overall, the ECSP has been effectively managing and overseeing the disposition of thousands of concerns and hundreds of corrective action plans over several years. The structured, multi-tiered corrective action closure process, involving separate, independent reviews by the WBN Quality Assurance (QA) organization and the Concerns Resolution Staff (CRS), helps to ensure that corrective actions are closed out in an effective manner. Of course, the results of the NRC's, as well as TVA's audit and inspection process, increase TVA's sensitivity to various closure issues and reinforce TVA's resolve to properly address concerns. To that end, TVA will conduct a review of ECSP concerns (Class D and E) as described more fully in Attachment 1 to this enclosure.

Class C Concerns

NRC's second concern was that TVA did not have a formal program within ECSP to document the resolution of Class C employee concerns.

TVA agrees that the CATD process within ECSP does not apply to Class C concerns. However, from the outset of the ECSP no corrective action plans, and therefore no CATDs, were prepared for Class C concerns since they were already being addressed through other programs. CATDs were created to track and verify closure of Class D and E concerns only.

TVA views all employee concerns as important. The ECSP subcategory reports contain definitions of each class of concern, including Class C concerns. Because Class C concerns had been determined to have corrective actions already initiated, their resolution was not monitored in the same manner as Class D and E concerns for which TVA had to develop new corrective actions.

TVA also acknowledges that some Class C corrective actions may have changed somewhat or been rendered unnecessary over the years. This is a natural result of TVA's implementing broad-based WBN program plans and special programs which continue to have an impact on WBN activities today. These programmatic improvements have been, and continue to be, carried out under approved processes to ensure compliance with regulatory requirements and TVA commitments. This overall Watts Bar corrective action strategy is discussed in detail in the Watts Bar Nuclear Performance Plan (WBNPP), which was endorsed by the NRC in a December 28, 1989, Safety Evaluation Report. To the extent any significant Class C corrective actions have been changed, TVA believes there is reasonable assurance that they have been or will be addressed by the broad corrective actions described in the WBNPP.

Insófar as Class C hardware corrective actions are concerned, additional assurance regarding the adequacy of plant hardware and equipment will be provided through a series of component and preoperational test programs which are a part of TVA's Operational Readiness Program. Also, the Program for Assurance of Completion and Assurance of Quality (PAC/AQ) reviews employee concerns issues (including Class C concerns and CATDs) as one element of the vertical slice reviews conducted to help ensure hardware readiness for operation. To date, 4 such vertical slice reviews have been completed with no significant issues having been identified in the area of employee concerns.

The results of NRC's, as well as TVA's audit and inspection process, increase TVA's sensitivity to the tracking of Class C concerns to resolution and reinforce TVA's resolve to properly address concerns. To that end, TVA will conduct a review of ECSP concerns (Class C) as described more fully in Attachment 1 to this enclosure.

Conclusion

In conclusion, TVA believes that the ECSP process developed and proceduralized beginning in 1985 is working effectively to resolve concerns and that the lack of a tracking process within ECSP for Class C concerns does not represent a program weakness.

In order to further reinforce the bases for our conclusion, TVA will review ECSP concerns (Class C, D, and E) to determine whether corrective actions adequately resolved or will resolve the concerns. The scope and depth of this review are further discussed in Attachment 1 to this enclosure.

JUNE 24, 1993, NRC LETTER CONCERNING NOV 50-390, 391/93-24-01

The subject NRC letter raised several questions concerning the TVA response to Notice of Violation 50-390, 391/93-24-01. The NRC concerns are restated below and addressed by TVA.

NRC Concern

"Your response did not fully address the violation basis in that PIR WBNWBP8770PER and the corrective actions for CATD 11200-WBN-06 used the unsupported assumption that all discrepancies found would be labeling problems to disposition the vendor wired safety-related panels question. We are unable to assess the adequacy of your corrective action until we understand the reasons why this violation occurred. Specifically, why the engineering review for the PER and CATD determined the unsupported assumption to be acceptable and why the supervisory, management, and independent oversight reviews for the PER and CATD failed to identify this inadequacy.

We also have concern about the corrective actions identified in your response. The revised and approved corrective action program identified in your response did not provide recurrence control for this problem since the PER was revised (to

use the unsupported assumption) and closed after the program improvements were made."

TVA Response

Nonconformance Report (NCR) W-205-P was written to address potential configuration problems in electrical panels. During the walkdowns performed under the NCR corrective action plan, several thousand deficiencies were documented. These deficiencies fell into one of three major classifications (labeling, configuration control, and physical damage). Approximately 97 percent of the deficiencies were classified as labeling deficiencies. The organization responsible for the NCR determined that the documented deficiencies did not meet the established definition for significance. Only significant NCRs are upgraded to Significant Condition Reports (SCR) and receive a formal root cause analysis and extent of condition review.

During the review of the corrective action plan for the NCR, site engineering reviewers did not change the non-significant determination made by the responsible organization. Without the benefit of a detailed review of each documented deficiency, the NCR would have been conservatively determined to be significant today due to the large number of deficiencies associated with safety-related components.

Subcategory Report Number 11200 contained, in part, a review of NCR W-205-P. Of the three categories of deficiencies documented in the NCR, the ECSP reviewers only identified labeling deficiencies as being an unaddressed concern. The only CATDs generated from the review of NCR W-205-P involved the labeling issue. This decision appears to have been made by ECSP reviewers based on corrective actions already in progress for configuration control deficiencies (SCR 6297-S), the non-significant classification of the NCR, and the relatively small percentage of non-labeling deficiencies (\approx 3 percent) documented through the walkdowns performed for the NCR. This was not a sufficient basis for determining acceptance of any unidentified physical damage deficiencies on the uninspected safety-related vendor wired panels.

The problem description for CATD 11200-WBN-06 is stated as follows: "It is not clear whether all safety-related vendor wired panels have been inspected or scheduled for inspection to ensure that vendor wiring is properly labeled." The CATD description does not include concerns associated with configuration control or physical damage. Therefore, PIR WBNWBP8770PER is considered to be an acceptable resolution to the CATD and the improved corrective action program is still considered to provide adequate recurrence control.

The engineering, supervisory, management, and independent oversight reviews of both the CATD and PER focused on labeling deficiencies only. The scope of these reviews were limited to the scope of the problem statement (labeling) and relied on the disposition of NCR W-205-P to resolve the non-labeling deficiencies. Therefore, the physical damage deficiencies were not reevaluated during these reviews.

TVA agrees that failure to address potential physical damage deficiencies in safety-related vendor wired panels is a concern. As discussed above, deficiencies in this category were determined by previous reviews not to be significant. The significance determination for NCR W-205-P was challenged by Finding Identification Report WBFIR 930012307 which was initiated coincident with and independent of the performance of NRC Inspection 50-390, 391/93-24. A detailed engineering review of the non-labeling deficiencies revealed that the NCR did meet the definition of significant in effect at the time the NCR was generated.

The corrective actions stated in TVA's response to Notice of Violation 50-390, 391/93-24-01 were based primarily on the approved corrective action plan contained in WBFIR 930012307. TVA's response to the violation contained the following commitment: "TVA will develop inspection criteria and perform a walkdown of those vendor wired safety-related panels required for Unit 1 operation which were not previously included in the NCR W-205-P walkdown." This corrective action will address the physical damage concern.

As stated in TVA's response to Notice of Violation 50-390, 391/93-24-01, the Design Baseline and Verification Program Corrective Action Program and startup test procedures were recently reviewed to ensure that these programs detect and correct configuration control/wiring errors. These programs ensure that the functional configuration of portions of systems which are required to mitigate design basis events are accurately depicted on control room drawings. (Safety-related control room drawings include electrical single line and schematic drawings.) No further action is planned to address the configuration control concern.

NRC Concern

"We were also unable to identify your corrective actions for Unit 2."

TVA Response

As stated above, TVA's response to Notice of Violation 50-390, 391/93-24-01 was based primarily on the approved corrective action plan contained in WBFIR 930012307. This FIR was written to apply to both Unit 1 and Unit 2. As such, the FIR must address Unit 2. The corrective action plan for Unit 2 will be developed after the corrective action plan for Unit 1 has been completed. Unit 2 safety-related vendor wired panels required for Unit 1 operation are being addressed under the corrective action plan for Unit 1.

NRC Concern

"It is also unclear whether the associated CATDs have been reopened as part of the corrective action."

TVA Response

CATD 11200-WBN-06 will not be reopened as part of the corrective action for the violation. As stated above, the CATD was written to address labeling deficiencies only. Concerns related to physical damage will be addressed under WBFIR 930012307.

ATTACHMENT TO ENCLOSURE 1

EMPLOYEE CONCERN SPECIAL PROGRAM LOOKBACK REVIEW (WBN)

TVA has initiated a lookback review of the corrective actions taken in order to address the ECSP employee concerns. This review will include substantiated concerns with a focus on ensuring that the affected hardware has been corrected. It will include field verifications when feasible. When field verifications are not feasible, the documentation leading to the field fix will be verified. This review will be documented. The corrective actions that will be reviewed for this project include those which address pre-February 1, 1986, employee concerns which are safety-related, have been substantiated, have been classified Class C, Class D, or Class E, and affect WBN Unit 1.

The review conducted by this project will provide an increased level of confidence that substantiated safety-related concerns have been effectively resolved and corrected. Any discrepancies identified during the lookback review will be resolved through the appropriate site program.

The review team will be independent of the line organizations and will report to Completion Assurance. It will be staffed with multi-disciplined, senior technical personnel, and will be conducted with detailed project instructions. Appropriate reviews and approvals will be part of the process. These reviews include both technical and quality assurance aspects of the work. The instructions will be of sufficient detail, including flow charts and diagrams, to ensure consistent implementation of the key elements included in the project plan methodology. Auditable project files will be maintained current during the life of the lookback project. An expedited prototype review will be performed prior to finalizing the project instructions and data forms in order to "debug" the process and to determine staffing needs to complete the project.

In addition to the review of closed CATDs and Class C concerns, open CATDs will be processed in a manner similar to the lookback effort. This will include a concentration on possible effects on hardware, field verifications, technical discipline reviews, as well as the traditional programmatic aspects and details for each issue.

The employee concern lookback review was initiated in early August 1993 and is expected to be completed before the end of the first quarter of 1994. Information and data developed during the course of in the project may warrant consideration of limiting or curtailing the review if the results prove positive.

ENCLOSURE 2

LIST OF COMMITMENTS

The following commitment is the only commitment not previously identified in TVA's response to Notice of Violation 50-390, 391/93-24-01.

- The Employee Concerns Special Program (ECSP) lookback review is expected to be completed before the end of the first quarter of 1994.