



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

William J. Museler  
Site Vice President, Watts Bar Nuclear Plant

NOV 19 1993

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) - NRC INSPECTION REPORT 50-390, 391/93-24 -  
NOTICE OF VIOLATION 50-390, 391/93-24-01 - SUPPLEMENTAL RESPONSE

The purpose of this letter is to provide a supplemental response to the subject Notice of Violation (NOV). TVA responded to the subject NOV on June 8, 1993 and on August 20, 1993. During the week of September 13-17, 1993, WBN and NRC Region II staff personnel discussed several issues related to TVA's responses to the subject NOV. This submittal supplements the previous NOV responses based on clarification of the NRC concerns.

Enclosure 1 contains TVA's response to NRC concerns related to previous responses to NOV 50-390, 391/93-24-01. Enclosure 2 contains a list of commitments made in this submittal.

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

Very truly yours,

William J. Museler

Enclosures  
cc: See page 2

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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

NOTICE OF VIOLATION 50-390, 391/93-24-01  
SUPPLEMENTAL RESPONSE

In a meeting with NRC Region II staff personnel during the week of September 13-17, 1993, NRC concerns related to TVA's previous responses to the subject Notice of Violation (NOV) were clarified. Based on these clarifications, a commitment was made to address those concerns through a supplement to the previous NOV responses.

The NRC concerns, and TVA's response to each, are listed below:

NRC CONCERN: TVA's letter of August 20, 1993, stated that the percentage of non-labeling deficiencies identified in NCR W-205-P was approximately 3 percent. Employee Concerns Special Program (ECSP) Report 11200, NRC Inspection Report 50-390, 391/93-24, and TVA Finding Identification Report WBFIR 930012307 each state that 7.2 percent of the reviewed deficiencies were non-labeling. Please clarify this discrepancy.

RESPONSE: TVA did not properly identify the categories that comprised the 97 percent and 3 percent classifications. The labeling and configuration control deficiencies represented approximately 97 percent of the ECSP reviewed deficiencies. The physical damage deficiencies represented approximately 3 percent of the ECSP reviewed deficiencies.

NRC CONCERN: The CATD 11200-WBN-06 numerical analysis of the deficiencies documented in NCR W-205-P only encompassed 21 of the 61 vendor wired safety-related electrical panels inspected. The numerical analysis identified 3,675 deficiencies. The total number of deficiencies documented in the NCR is probably closer to 10,000. What is TVA's justification for dismissing this large number of labeling and configuration deficiencies as insignificant and not having an adverse impact on future maintenance and operational activities?

RESPONSE: TVA has not dismissed configuration deficiencies as insignificant. These deficiencies are systematically addressed by the Preoperational Test program, which ensures components and systems meet functional design requirements. As stated in previous submittals, the hardware items on the remaining panels are being corrected.

Labeling inside the vendor electrical panels is a desirable convenience, but not a requirement of WBN design specifications for vendor qualified equipment. Sufficient controls in

Modifications, Startup and Plant Maintenance programs exist to ensure wiring activities are safely performed.

NRC CONCERN: In a letter dated April 24, 1992, NRC provided TVA with information concerning employee-identified specific hardware deficiencies which had not previously been made available to TVA. In that letter, NCR W-205-P was tied to Discrepancy Report (DR) WB-DR-85-75. The DR documented a concern that maintenance requests written to correct problems identified in the NCR may not have been effective in correcting those problems. Why was CATD 11200-WBN-06 not reopened when the WB-DR-85-75 information was provided to TVA on April 24, 1992? Why was the improper disposition and closure of WB-DR-85-75 not identified when reviewed by TVA?

TVA responded to the NRC April 24, 1992, letter in August and November 1992. These responses only addressed the specific examples cited and not the overall issue raised by NRC. TVA needs to re-evaluate the information provided to NRC in the two subject responses with regard to the WB-DR-85-75 issue and the adequacy of other information provided to NRC.

RESPONSE: The hardware information provided in NRC's April 24, 1992, letter was addressed outside the Concerns Resolution program. Each item was reviewed by the responsible department to ensure proper correction of the problem, but no effort was made to specifically match the CATDs to the referenced concerns. Further, the emphasis of this letter was hardware issue resolution. The problem with DR closure was not addressed. No match was therefore made between information on problems with NCR W-205-P and CATD 11200-WBN-06. Had this correlation been made, the problems with the closure of the CATD identified by the inspectors would likely have been understood earlier by TVA.

CATD 11200-WBN-06 was subsequently reopened to address closure deficiencies. The Corrective Action Plan for the CATD will specifically document the resolution of labeling, configuration control and hardware deficiencies in light of the information now known regarding NCR W-205-P and Deficiency Report WB-DR-85-75. Further, a Problem Evaluation Report (WBPER 930292) was issued to document resolution of the inadequate closure of NCR W-205-P as indicated by WB-DR-85-75. Resolution of this PER will require verification of the acceptability of the previously performed work on the inspected panels.

Based on the information learned from this inspection, the Concerns Resolution Staff has now provided the April 24, 1992, NRC letter hardware information to the responsible organizations and to the verification organization for the applicable CATDs. This information will be considered as part of the CATD lookback effort described in TVA's letter dated August 20, 1993.

NRC CONCERN:

On June 8, 1993, TVA responded to NRC Notice of Violation (NOV) 50-390, 391/93-24-01. The reason for the NOV was identified as being the inadequate resolution of NCR W-205-P. This was a restatement of the NOV, not a statement of the cause. The NOV issue is one of improper attitude towards corrective action, lack of thoroughness in identifying and addressing root causes and generic issues, inadequate supervisory and management review (including the Senior Management Review Group), and inadequate independent oversight reviews by the Employee Concerns Special Program (ECSP) team and QA reviews of the CATD.

Revising the corrective action program will not prevent recurrence of the above issues as identified in response to the NOV. Many of the opportunities to identify and correct these problems occurred in 1991 and 1992, after the corrective action program changes were implemented.

RESPONSE:

Many of WBN's original decisions to focus only on labeling issues in the Subcategory Report, CATD and PER (PIR WBNWBP 8770 PER) were derived from the single incorrect conclusion that NCR W-205-P had addressed or was addressing the actual hardware deficiencies in the vendor panels. Upon review later, WBN concluded that the insignificance determination which resulted in cutting off further review of other panels was the cause of the violation. WBN was not able to fully determine the basis for this significance determination in 1985.

The mistaken conclusion regarding correction of hardware deficiencies carried through subsequent reviews and verifications which resulted in concern only for the lesser issue of labeling.

To ensure that the significance determination error was isolated, the Quality Assurance Department, through the Senior Management Review Committee, conducted a random sample of nonconformance reports closed prior to March 1987, classified as not being significant, and which were dispositioned as rework, reject, or other. No other examples of improperly classified NCRs were identified. No further reviews in this area are planned.

The CATD and PER reviews that failed to identify and correct the problems with NCR W-205-P again focussed on the defined problem of labeling. It was noted that there was a problem with the translation of the concern from the subcategory report to the CATD form. The subcategory report correctly summarized the problem as the incomplete walkdowns of panels. The CATD form, however, documented the problem as the incomplete walkdowns of panels for labeling. Nevertheless, insufficient review was made throughout the process to ensure the original ECSP concern was actually addressed.

To ensure this problem is corrected, the CATD lookback project, discussed previously, is specifically ensuring that substantiated hardware concerns are being adequately addressed.

NRC CONCERN: TVA's NOV response and WBFIR 930012307 state that inspection criteria will be developed and that a walkdown of previously uninspected vendor wired safety-related electrical panels required for Unit 1 operation will be performed. In the letter dated August 20, 1993, TVA implied that this action only addressed the physical damage concern. What is the intent of this corrective action?

RESPONSE: The cited corrective action is limited to identifying and correcting physical damage only. The acceptance criteria for these walkdowns has been reviewed and accepted by Nuclear Engineering, Quality Assurance, Operations, and Maintenance. As stated previously, configuration is being addressed by other programs, and labeling corrections are not a requirement.

Because of the problems identified in Deficiency Report WB-DR-85-75 regarding maintenance actions in response to the original walkdowns, a review of the FIR corrective action walkdown criteria was performed. The Modifications department found that the criteria being used to walkdown the remaining panels is comprehensive with regard to the DR deficiencies.

NRC CONCERN: TVA's NOV response only states actions to be taken on vendor wired safety-related electrical panels required for Unit 1 operation. Although WBFIR 930012307 applies to Unit 2, no mention of a Unit 2 corrective action plan is made either directly or by reference.

RESPONSE: The corrective actions for Finding Identification Report (FIR) WBFIR 930012307 and previous responses to this notice of violation include the inspection of remaining panels required for Unit 1 operation. Based on WBN electrical design, many of these panels are Unit 2 panels. Because the FIR has been assigned to both Unit 1 and 2, disposition of Unit 2 panels not previously addressed as part of the Unit 1 review would have to be addressed to close the FIR for Unit 2. To clarify WBN planned actions, the FIR Corrective Action Plan will be revised to evaluate/inspect the remaining Unit 2 vendor wired safety-related panels prior to closure of the FIR for Unit 2.

NRC CONCERN: TVA's NOV response did not address the inadequate disposition of NCR W-237-P. This is another specific example of inadequate disposition of vendor panel wiring problems and is part of the NOV issue.

RESPONSE:

NRC W-237-P deals with wiring deficiencies in the fifth diesel generator. The fifth diesel is no longer in the design basis for Unit 1. However, an initial review of closure documentation of NCR W-237-P has not identified any information regarding the resolution of the cited wiring discrepancies for the four required diesel generators. Because the NCR was marked "insignificant" it is possible the deficiencies were not reviewed for the remaining generators. Accordingly, WBN will conduct a further evaluation of the applicability of any hardware discrepancies to the remaining generators. Any identified deficiencies will be documented in accordance with the WBN corrective action program.

NRC CONCERN:

A Level II deviation to the Corrective Action Plan (CAP) for CATD 11200-WBN-06 was approved by the TVA Senior Management Review Group on June 2, 1992. The CAP item number, associated justification and NRC concern for each change are as follows:

(2.b): A correction was made for current procedure reference. Point-to-point inspection verification of modifications performed by TVA will ensure configuration adequacy by procedure MAI-3.3 versus QCP-3.06-2 and MAI-5.

Is a point-to-point inspection verification still required for modifications? QA verification discusses QC verification of identification and termination for modifications, but this is not always done. TVA Problem Evaluation Report WBPER 930102 documented four modifications which were incorrectly wired. In three of the four examples cited, the same QC inspector had verified accuracy. No point-to-point verification had been required. Additionally, procedure SMP-9.0 does not require second party verification of the relanding of electrical leads.

(2.e): A correction was made for current procedure reference. Permanent labels will be in agreement with the controlling document as required by procedure SSP-2.52 versus AI-9.2.

Procedure SSP-2.52 only addresses component and system identification, not the internal wiring of electrical panels. This is a nonconservative/incorrect change to the CATD CAP.

(3.0 AND 4.0): Based on the investigation performed for PIR WBNWBP 8770 PER, the detailed corrective actions initially identified in the CATD CAP were changed to state that labeling discrepancies would be handled in accordance with SSP-3.04 at the time of discovery. The investigation into the extent of condition for NCRs W-205-P and W-237-P revealed no examples of requirements violated and included the vast majority of vendor wired safety-related panels susceptible to labeling discrepancies.

Provide the basis for stating that no examples of requirements violated were found. How did TVA determine that the vast majority of vendor wired safety-related panels susceptible to labeling discrepancies were included in the extent of condition investigations and what makes the vast majority an acceptable level of conformance?

General: Why was the CAP deviation approved by the Concerns Resolution Staff, QA, and the Senior Management Review Group when TVA had the information necessary to properly evaluate the CAP deviation request?

Based on the above concerns, explain why CATD 11200-WBN-06 was not reopened.

RESPONSE:

As stated above, CATD 11200-WBN-06 was reopened. The statements in the deviation request cannot be supported by available documentation. Accordingly, the referenced deviation request inadequacies were the subject of a PER (WBPER 930293). The specific concerns discussed above will be addressed by the resolution of this PER.

The individuals who prepared the deviation request apparently relied on information in the subcategory report without specifically verifying that information in all cases. The specific technical reviewer supporting the Senior Management Review Group (SMRG) for this CATD indicates that the review for acceptance of the deviation request was largely based on the case presented in the request itself. Although the inaccuracies in the deviation request were not identified by the review in this case, this does not appear to be a widespread problem. The SMRG and its Technical Reviewers have been very effective in evaluating and approving or rejecting CAP deviations. The reviewers rely not only on the information provided but extensively use other information as appropriate. Historically, the SMRG has rejected over 30 percent of the CAP deviations requests submitted to them and have approved with clarifying comments an additional 30 percent. While they may not independently verify all supplied information, they do normally verify such information as is necessary to reasonably review the CAP.

The Quality Assurance and Concerns Resolution Staff reviewers were again focussed on the labeling issues. Although the QA reviewers expressed some concern during the review as to whether the component labeling process would correct panel wiring problems, they did not challenge a response that the panels were addressed and did not document the concern in the CATD package.

NRC CONCERN:

During a review of the CAP for CATD 11200-WBN-06, the following concerns were identified. The CAP item number and associated NRC concern for each item are as follows:

(2.d): Memorandums on closure of NCR W-205-P indicate that only drawing changes were required. Maintenance Requests appear to have been generated to correct many deficiencies. Justify this QA review statement.

(5.0): This corrective action stated that vendors of safety-related equipment are required to provide certified as-built drawings with supplied equipment. NRC Inspection Report 50-390, 391/93-27 demonstrated that this action was never put into place. Explain how the CATD closure verification process failed to identify this condition.

RESPONSE:

(2.d): The memorandum in the closure file for the NCR made several references to the need to correct drawings, but are not clear regarding the use of Maintenance Requests (MRs) for correction of hardware. These MRs are referenced in Deficiency Report WB-DR-85-75 which identifies numerous deficiencies with a sample of the NCR W-205-P MRs.

Due to the large number of MRs, it is not clear why they are not specifically identified in the NCR closure documentation. Not considering the MRs in the closure review and verification was evidence of an inadequate closure review.

(5.0): The closure verification package made reference to a 1985 policy memorandum dated November 26, 1985, requiring requisitioning branches to obtain as-built drawings of vendor supplied safety related equipment. No evidence of compliance with the 1985 memorandum was provided with the documentation package. The line organization failed to provide sufficient documentation of the effectiveness of this action, and QA apparently failed to challenge this deficiency.

Actions: Quality Assurance has concluded that the QA reviewers could have had a more questioning attitude regarding the disposition of the hardware configuration issues. These issues have been discussed with QA reviewers to reemphasize that they are encouraged and expected to have a questioning attitude and to challenge any response which may not meet the full intent of the CATD corrective action plan.

The ongoing lookback review of CATDs provides assurance that hardware issues have been adequately addressed and the deficiencies in the closure reviews will be discussed with CATD reviewers in QA and CRS. No further corrective action should be required.

NRC CONCERN: In the disposition for Problem Identification Report PIR WBNWBP 8770 PER, it is unclear what "non-specific postulated discrepancies" are or how TVA can predisposition postulated discrepancies as use-as-is. Explain the PIR corrective actions.

RESPONSE: When dealing only with labeling deficiencies in the vendor panels, WBN considered it was acceptable to generically disposition those inconsistencies. As indicated by NRC, this disposition applied to the discrepancies identified by the walkdowns, and those that might exist on the panels that had not been inspected.

This generic disposition was based on the expectation for work in the panels to be performed based on approved drawings and not on reliance on vendor labeling.

The corrective action plan prepared for FIR WBFIR93012307 continues this approach in that no additional inspection for labeling deficiencies are required, however, specifically identified labeling deficiencies are to be resolved.

SCHEDULE: The actions identified above will be completed prior to the closure of CATD 11200-WBN-06.

CONCLUSION: Based on a better understanding of the NRC concerns provided by the staff, WBN considers that the actions discussed in this and previous responses will comprehensively address the violation. Specifically, the CATD has been reopened to fully address the initial concern. The remaining panels are being inspected and steps are underway to verify adequacy of the initial work on the panels that were inspected. The departments responsible to review the closure of these CATDs are now more aware of the impact of NRC's additional information about hardware deficiencies. Finally, the comprehensive lookback effort now underway will review corrective actions to confirm these important issues were effectively resolved and documented.

ENCLOSURE 2

LIST OF COMMITMENTS

1. The corrective action plan for CATD 11200-WBN-06 will specifically document the resolution of labeling, configuration control and hardware deficiencies in light of the information now known regarding NCR W-205-P and Deficiency Report WB-DR-85-75.
2. Resolution of WBPEN 930292 will require verification of the acceptability of the previously performed work on the inspected panels.
3. This information (April 24, 1992 NRC letter) will be considered as part of the CATD lookback effort described in TVA's letter dated August 20, 1993.
4. To clarify WBN planned actions, the WBFIR 930012 307 corrective action plan will be revised to evaluate/inspect the remaining Unit 2 vendor wired safety-related panels prior to closure of the FIR for Unit 2.
5. Accordingly, WBN will conduct a further evaluation of the applicability of any hardware discrepancies (re: NCR W-237-P) to the remaining generators. Any identified deficiencies will be documented in accordance with the WBN corrective action program.
6. Accordingly, the referenced deviation request inadequacies were the subject of WBPEN 930293. The specific concerns discussed above will be addressed by the resolution of this PER.
7. The ongoing lookback review of CATDs provides assurance that hardware issues have been adequately addressed, and the deficiencies in the closure reviews will be discussed with CATD reviewers in QA and CRS.