Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402

JUL 19 1991

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 - REVISION/CLARIFICATION OF PREVIOUS TVA COMMITMENTS AND STATEMENTS

In an effort to improve the WBN work control process and adopt the Browns Ferry Nuclear Plant's Automated Workplan Control Program, some previous commitments or statements made by TVA have been identified that require revision or clarification.

As discussed with the Region II staff on July 19, 1991, enclosed is a listing of the previous commitments or statements, TVA's revised/clarified response, and a justification for each revision.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY

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Enclosures
cc: See page 2

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U.S. Nuclear Regulatory Commission

JUL 19 1991

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ENCLOSURE 1

WATTS BAR NUCLEAR PLANT (WBN)
REVISIONS/CLARIFICATIONS TO
PREVIOUS TVA COMMITMENTS AND STATEMENTS

Due to improvements being made in the WBN work control process, several commitments or statements have been identified that require revision or clarification. The listing that follows provides a restatement of the original commitment or statement, the revised/clarified response, and a justification for each revision.

1. Employee Concern Special Program Report 11200 Workplan/Work Control

Section 4.1.c.2, page 37, "Reviewed Appropriate Procedures and Instruction," contains the following statement:

"The size of the workplan has been limited. Future workplans must not exceed 3,000 man-hours."

Revised Discussion:

Guidelines have been established for controlling the size of workplans. They entail providing a concise workplan format, standardizing the contents and implementing an automated workplan database per AI-8.25, "Automated Workplan Database". This will control the size of the workplan, reduce confusion, maintain work control, expedite the work effort, and facilitate closure.

Justification for Revised Response:

The 3,000 man-hour number had previously been chosen as an estimate of a workplan size that could be managed, performed, and closed out with few difficulties. By providing a concise workplan format, standardizing the contents and implementing an automated workplan data base, TVA considers that effective controls in the new program will prevent unmanageable sized workplans from being issued to the craft. Accordingly, the 3,000 man-hour limitation is considered no longer necessary.

2. Response to Notice of Violation 390/86-21-01 dated March 16, 1987

Under Section 4, "Corrective Steps Which Will Be Taken to Avoid Further Violations," the following was stated:

"The Preoperational Test Section is required to review all workplans for adequate functional and/or postmodification testing. These review requirements are specified in AI-8.5, "Control of Modification Work on Transferred Systems Before Unit Licensing."

Revised Response:

Testing required for plant modifications/installations will be identified through the process of reviewing the design output document (Design Change Notice) rather than being identified at workplan approval.

Justification for Revised Response:

Emphasis is being redirected from identifying testing at the workplan approval point to the DCN approval point. This allows quicker identification of any problems associated with testing prior to DCN issue. The closure documentation for the modification will identify the testing performed.

3. Response to 89-200-A1 dated April 27, 1990

Under the Reason for Denial of Violation A, Example 1 section, the second paragraph states:

"WBN's Administrative Instruction (AI)-8.8 provides the administrative controls and requirements for the development, review, and approval of workplans to accomplish the various installation and modification activities performed by the construction organization (e.g., hand switch installation). Detailed instructions associated with each individual work activity required to accomplish an installation or modification (e.g., cable installation) is included in the workplan by reference to work activity procedures. The work activity procedures make use of generic data sheets that are adapted by the Nuclear Construction (NC) engineer as necessary to document the specific task associated with the work activity (e.g., wire bundle fabrication, wire termination). In generating data sheets from the work activity procedures referenced in approved workplans, either construction engineers or QC inspectors mark "not applicable" for those inspection attributes on portions of generic data sheets that do not apply due to the scope of the work performed. The program in place at the time required a back-end QA review of quality-related workplans at the time of workplan closure which provides confidence that the critical and necessary attributes have been QC inspected. TVA has recently implemented an enhanced inspection program which makes use of inspection reports (IRs) for work activities. This program will replace data sheets with IRs as appropriate in the workplans. The IRs are developed by QA on the front end to capture the critical and necessary attributes for work activities, and a technical review of the IR is performed by QA during the closure process. This enhanced inspection program provides additional assurance that critical and necessary attributes are appropriately inspected and documented."

Clarification Response:

The work control process at WBN is presently being enhanced. AI-8.6, "Modification Workplans," now provides the overall criteria for obtaining Quality Assurance (QA) review and approval of workplans and subsequent workplan revisions. The criteria provided in AI-8.6 does not allow the Responsible Engineer to revise or delete inspection hold points without obtaining QA review.

The new Modification and Addition Instructions (MAIs) contain minimum inspection points as established in the model inspection plans for the individual work activity. The Inspection Report is now considered an internal QA document for trending purposes and the data sheets and work instruction signoffs contained in the workplan are considered the QA record of inspection.

Justification for the Response:

QA records of inspection/acceptance are to be maintained as a package within the original workplan.

4. Response to Notice of Violation 90-09-03, dated August 6, 1990

Under Section 4.0, "Corrective Steps Taken and Results Achieved," the following is stated:

"To address the problem associated with updating control room drawings after completion of modifications, condition adverse to quality report (CAQR) WBP 900114 documented this condition, and AI-8.19, "Marking Control Room and Shift Operation Supervisor's Primary Drawings," has been issued. This procedure changes the responsibility for control room drawing updating to the design organization. Detailed requirements for consistent marking of drawings are provided. In addition, guidance is given to the operators on the use of the drawings. The procedure outlines the way the marked-up drawings are to be used to determine the plant configuration for interim operation."

Under Section 5.0, "Steps Taken to Avoid Further Violation," the following is stated:

"TVA plans to continue to return modified equipment to service based on partial completion of design changes using discipline-based workplans. The formal document update and issue will continue to be based on design package completion. The control room drawing markup is an interim measure designed to give the operators the most up-to-date information. This program is similar to the program at TVA's operating plants."

Clarification Response:

The process of returning components to service and closure of the modification is now based upon completion of the DCN not the individual workplan. Nuclear Engineering's responsibility as part of the modification closure process is to ensure proper revisions are made to Shift Operations Supervisor (SOS)/control room drawings prior to DCN closure.

In some circumstances where a portion of the system is needed prior to completion of all work, a partial DCN closure will be used to obtain the required drawing update. Certain limited activities such as lifting or modifying a safety clearance or performing a post modification test may be performed before DCN closure and drawing update. Before permitting these activities, Operations will ensure that the system configuration is known through a walkdown of the system and by checking the changes against the drawing in the Design Change Document Tracking System.

Justification for the Response:

The emphasis is being redirected from completing individual workplans to completing the entire modification. By completing the entire modification, a clear concise drawing can be placed in the SOS/control drawing files which should reduce confusion caused by previous partial updates or mark-ups of these drawings.

5. Response to Violation 390/86-24-01 dated September 19, 1988

Part of the second paragraph and all of the third paragraph of this response stated:

"Revision 4 to the NQAM, Part I, Section 2.16 requires that: a) items discovered during in-process work activities shall be documented on a Condition Adverse to Quality Report (CAQR) when (1) a repair or accept-as-is disposition is required; (2) extensive, complex, or abnormal rework is involved; or (3) a common mode failure is created or identified; or b) conditions adverse to quality which do not meet the requirements for a CAQR are required to be documented in one of the administrative control programs which requires the CAQ to be corrected, tracked, and trended. This requirement applies regardless of whether or not the item involved is included within the scope of the work controlling document.

Before November 15, 1987, WBN revised their implementing procedure to require that "in-process" deficiencies would be documented, corrected, and trended for the purpose of identifying any adverse conditions. The document which reflected this change and corrected the original cause of the violation at WBN was WBN-Construction Engineering Procedure 1.60 Revision 0, which superseded WBN-Quality Control Instruction 1.60 Revision 1."

Clarification Response:

The work control program (as defined in WBN-Construction Engineering Procedure 1.60, Revision 0, "Work Control") cited in the violation can no longer be utilized to identify, document, track, correct, or trend adverse conditions. If an adverse condition is identified while implementing work control documents, the user is referred to the corrective action program.

Justification for the Response:

The corporate corrective action program implemented at WBN standardizes the various programs in which adverse conditions are identified, tracked, corrected, and trended. The workplan is no longer recognized as an administrative control program under the corrective action program. As such, the response to this item is no longer valid.

6. Response to Violation 390/86-02-01, Part b, dated April 21, 1986

Under Corrective Steps Taken to Avoid Further Violation section, the following is stated:

"All modification personnel (engineering and craft) have been instructed to not alter any vendor supplied packages without the DNE-approved instructions. AI-8.5 and -8.8 will be revised to add this special precaution for the altering of vendor-supplied packages."

Revised Response:

AI-8.6, "Modification Workplans," has removed the special precaution for the altering of vendor-supplied packages.

Justification for Revised Response:

AI-8.6 has been revised to require installation of plant features per the workplan instructions and "design controlled output documents." In AI-8.6, a reference is included to AI-4.4, "Vendor Manual Process and Control," for proper control and use of vendor manuals. These requirements supercede the process defined in AI-8.5, "Control of Modification Work on Transferred Systems before Unit Licensing," and AI-8.8, "Control of Modification Work after Transfer."

With the controls specified to work only to design controlled output documents and approved vendor manuals, the special precaution in the original response is no longer necessary.

7. Revised Response to Deviation 50-390/82-27-05, dated January 19, 1983

TVA's response to Deviation 390/82-27-05 stated that:

". . .The procedure for inspection of cable installation, WBNP-QCP-3.05 will be revised such that 10 percent of all safety related cables installed after the effective date of the revision will be inspected by the electronic signal trace method to verify that they were routed as specified on their respective pull slips."

Revised Response:

Modification and Addition Instruction (MAI)-3.2, "Cable Pulling For Insulated Cables Rated Up To 15,000 Volts," will be revised to delete the requirement to signal trace cables to verify routing.

Justification for Revised Response:

Cable installation activities at WBN are controlled in accordance with MAI-3.2 (supercedes WBN-CPI-8.1.8-E102 and WBN-CPI-8.1.8-E-100-A). Safety-related cable pulling activities presently require in-process QC monitoring. One of the QC-verified attributes includes the witnessing and verification of cable route. The original commitment to signal trace cables was made during a period of bulk construction when there were not enough QC personnel onsite to support an in-process QC verification program of cable installations.

TVA considers this 100 percent in-process QC visual verification of cable installation and routing to be a more stringent requirement than the 10 percent sampling previously included in the site procedures. Therefore, this enhancement will further ensure that cables are routed in accordance with their design requirements.

In addition, based on the TVA analysis of results from previous programs (e.g., Environmental Qualification, Appendix R) involving routing for more than 4500 cables, it was determined that discrepancies from design output for previously installed cable were few in number and random in nature. It was further concluded that if similiar discrepancies go undetected, they will not constitute a safety issue. The validation of the computerized cable routing system data base was described in the Cable Issues Corrective Action Program Plan and approved by NRC on April 25, 1990, in the Safety Evaluation Report.

ENCLOSURE 2

LIST OF COMMITMENTS

1. TVA to revise site procedures to delete the 10 percent signal traced sampling of cable routing due to the independent third-party verification performed by QC for all safety-related cables.