



SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATING TO THE PROGRAMMATIC ASPECTS OF THE

EQUIPMENT SEISMIC QUALIFICATION

CORRECTIVE ACTION PROGRAM PLAN

TENNESSEE VALLEY AUTHORITY

WATTS BAR NUCLEAR POWER PLANT

UNIT 1

DOCKET NO. 50-390

1.0 INTRODUCTION

In a letter dated June 29, 1989, TVA submitted Revision 1 to its Corrective Action Program (CAP) Plan for equipment seismic qualification. The program plan addresses Conditions Adverse to Quality (CAQ) issues regarding activities related to seismic qualification of Category I and I(L) equipment for the Watts Bar Nuclear Plant (WBN) Unit 1 and common areas. These issues were identified in activities such as NRC's Seismic Qualification Review Team audits, employee concerns, and the Design Baseline and Verification Program (DBVP). The primary issues involved discrepancies between design and installation, discrepancies between inspection documentation and the installed condition, retrievability of installation documents, and interface control.

2.0 SCOPE

The scope of this CAP includes all Category I and I(L) equipment as defined in FSAR Section 3.2.1. The objective of this CAP is to provide assurance that Category I and I(L) equipment for Watts Bar are adequately qualified to withstand the design basis seismic events and that the as-designed and as-installed Category I and I(L) equipment and their supports meet the regulatory and licensing requirements including the FSAR design criteria.

Included within this scope is the resolution of the various deficiencies which formed the basis for the program. The sources of these deficiencies included such areas as the Employee Concerns Program, findings from efforts by various task groups, independent reviews as well as the TVA quality assurance program which identified a portion of the deficiencies. The scope is of a breadth and depth as to encompass a series of Problem Identification Reports (PIRs), Significant Condition Reports (SCRs), Non-Conformance Reports (NCRs), Conditions Adverse to Quality Reports (CAQRs), Corrective Action Tracking Documents (CATDs), Deficiency Reports (DRs) and NRC inspection findings.

Based on a review of the elements encompassed by the program, the staff finds the scope is adequate to address the known deficiencies and to uncover any new problem areas which, if left uncorrected, could jeopardize the health and safety of the public.

### 3.0 PROGRAM DESCRIPTION

The TVA program consists of the following major activities:

1. Review and revise design basis document.
2. Develop and maintain an equipment seismic qualification.
3. Ensure documentation retrievability for Category I equipment.
4. Perform engineering evaluations for Category I equipment.
5. Compile documentation for Category I equipment.
6. Perform walkthroughs and develop documentation for Category I(L) equipment.

Acceptability of Category I(L) equipment installations will be confirmed by area walkthroughs and development of required documentation and review of existing documentation. The documentation of Category I equipment will be reviewed for completeness and adequacy relative to the resolution of concerns defined from audit open items, CAQs, and other related programs, and activities such as PIRs, Employee Concerns, NCRs, SCRs, and related NRC activities. Recurrence control measures have been and will be taken to address root causes. Revisions to the FSAR as a result of ESQ CAP will be completed.

### 4.0 APPROACH

The execution of the program will be based on the sequential completion of the above major activities of the program. When the criteria and design bases have been successfully revised and updated and the appropriate design documents revised, the program will be implemented by a field walkthrough effort.

TVA defined responsibilities for its offices of Nuclear Engineering, Nuclear Construction, Nuclear Quality Assurance and Nuclear Maintenance in implementing the program plan. TVA has defined interfaces required to complete the program. The responsibilities are outlined in the program plan.

Based on its review of the program plan, the staff finds the approach as outlined above is adequate to accomplish the program objectives.

### 5.0 CONCLUSION

Based on its review of the program as outlined in the corrective action program plan, the NRC staff concludes that the document describes a plan for action which provides, upon successful implementation, a viable approach to correct the known deficiencies and to assure that the Category I and I(L) equipment are adequately qualified for seismic design conditions. The details of the CAP implementation including criteria, methodologies, and issue resolution will be evaluated by the staff in future reviews, audits, and inspections.