

APPENDIX D

QUALITY ASSURANCE PLAN  
FOR THE BROWNS FERRY NUCLEAR PLANT

D.1 Quality Assurance During Design and Construction

The original QA program for design and construction was described in the Browns Ferry Power Station Design and Analysis Report. The program was later described in both Appendix D of the Final Safety Analysis Report and the TVA Topical Report, TVA-TR75-1A. Currently, the TVA Nuclear Quality Assurance Plan defines and describes the QA program for Browns Ferry Nuclear Plant.

Design activities for plant modifications by Nuclear Engineering shall be in accordance with the latest approved revision of the TVA Nuclear Quality Assurance Plan.

D.2 General Electric Quality System for BWR Nuclear Steam Supply Projects

The working relationship between TVA and General Electric for the Browns Ferry Nuclear Plant quality control function was described in Amendment 5 to the Browns Ferry Power Station Design and Analysis Report. Over the course of performing the design and initial procurement activities for the Browns Ferry Nuclear Plant, the General Electric Quality Assurance Program was upgraded to reflect changes in regulatory requirements and industry standards. These changes first culminated in the G. E. Boiling Water Reactor QA Manual, NEDE-20586, Revision 0 which was applicable to activities starting September 27, 1974.

The present G. E. Boiling Water Reactor Quality Assurance Program is described in the G. E. Topical Report, NEDO-11209-04A, "General Electric Nuclear Energy Quality Assurance Program Description."

D.3 Quality Assurance Program for Station Operation

D.3.1 Compliance

The TVA Nuclear Quality Assurance Plan defines and describes the quality assurance program for operation of Browns Ferry.

D.3.2 Critical Structures, Systems and Components/Q-Lists

TVA prepares the Q-List, Q-List System notes, or General Q-List to document the classification of critical structures, systems, and components (CSSC) consistent with their importance to safety. Items designated on these lists are treated under the QA program as set forth in the Nuclear Quality Assurance Plan (NQAP).

As a minimum, those items that are necessary for inclusion in the listing are those that ensure:

1. The integrity of the reactor coolant pressure boundary.
2. The capability to shut down the reactor and maintain it in a safe condition.
3. The capability to prevent or mitigate the consequences of an incident which could result in potential offsite exposures comparable to those specified in 10 CFR 50.67.
4. Those other items which TVA considers should receive a graded level of quality assurance coverage by design or commitment.