

# **UNITED STATES** NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

# RELATED TO AMENDMENT NO. 233 TO FACILITY OPERATING LICENSE NO. DPR-33

# AMENDMENT NO. 252 TO FACILITY OPERATING LICENSE NO. DPR-52

# AMENDMENT NO. 211 TO FACILITY OPERATING LICENSE NO. DPR-68

# **TENNESSEE VALLEY AUTHORITY**

# BROWNS FERRY NUCLEAR PLANT, UNITS 1, 2, AND 3

DOCKET NOS, 50-259, 50-260, AND 50-296

# **1.0 INTRODUCTION**

By letter dated June 6, 1996 (Ref.1), the Tennessee Valley Authority (TVA or the licensee) submitted proposed amendments to revise Section 6, "Administrative Controls" of the Browns Ferry current Technical Specifications (CTS) to be consistent with the Standard Technical Specifications for General Electric nuclear plants (NUREG-1433, Ref. 5). On September 25, 1996, the U.S. Nuclear Regulatory Commission (the Commission or NRC) issued a proposed finding that the amendments involve no significant hazards consideration (61 FR 50346). By letters dated September 26, 1997, January 23, 1998, and May 19, 1998 (Ref. 2, 3, and 4, respectively), the licensee provided clarification and supplemental information which did not affect the original no significant hazards determination.

Consistent with the Commission's Final Policy Statement on Technical Improvements for Power Reactors (Ref. 6), many administrative control requirements have been transferred from control by technical specifications (TS) to control by other mechanisms, such as change control required by 10 CFR 50.54(a) for NRC-approved licensee quality assurance (QA) programs. In support of the proposed amendment, the licensee has submitted Revision 7 to the TVA Nuclear Quality Assurance Plan (NQAP) (Ref. 7), which incorporates relocated CTS requirements. This safety evaluation reviews the appropriateness and completeness of the CTS requirements relocated to the licensee's QA program.

# 2.0 BACKGROUND

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Section 182a of the Atomic Energy Act requires applicants for nuclear power plant operating licenses to include TS as part of the license. The Commission's regulatory requirements related to the content of TS are set forth in 10 CFR 50.36. That regulation requires that the TS include items in five specific categories: (1) safety limits, limiting safety system settings, and limiting control settings: (2) limiting conditions for operation (LCOs); (3) surveillance requirements; (4) design features; and (5) administrative controls. The regulation, however, does not specify particular items to be included in plant TS. Section 50.36(c)(2) provides, with



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respect to LCOs, four criteria to be used in determining whether particular items are required to be included in the TS. While the four criteria apply specifically to LCOs and cannot be appropriately applied to TS administrative controls, in adopting the revision to the rule (§50.36, Ref. 8), the Commission indicated that the intent of these criteria can be used to identify the optimum set of TS administrative controls. Addressing administrative controls, 10 CFR 50.36(c)(5) states that they "are the provisions relating to organization and management, procedures, record keeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner." The particular administrative controls to be included in the TS, therefore, are the provisions that the Commission deems essential for the safe operation of the facility that are not already covered by other regulatory requirements.

Accordingly, the staff has determined that administrative control requirements that are not specifically required under §50.36(c)(5), and which are not otherwise necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety, may be relocated to more appropriate documents (e.g., Security Plan, Quality Assurance Program (QAP), or Emergency Plan), that are subject to regulatory controls. Similarly, while the required content of TS administrative controls is specified in 10 CFR 50.36(c)(5), particular details may be relocated to licensee controlled documents where §50.54, §50.59, or other regulatory requirements provide adequate regulatory control.

NRC Administrative Letter (AL) 95-06 (Ref. 9) provides guidance to licensees requesting amendments that relocate administrative controls to NRC-approved QAP descriptions, where subsequent changes are controlled by the established QAP change control process in 10 CFR 50.54(a). AL 95-06 provides specific guidance in the areas of: (1) independent safety engineering group, (2) reviews and audits, (3) procedure review process, and (4) records and record retention. The essential guidance of AL 95-06 is that the regulatory process under 10 CFR Part 50, Appendix B and 10 CFR 50.54(a) provides sufficient control of these areas when TS requirements are relocated intact to NRC-approved quality assurance programs.

#### 3.0 EVALUATION

The licensee proposes to delete the following administrative control requirements from the TS on the basis that they either duplicate existing QA commitments or have been relocated to Revision 7 of the NQAP, where subsequent changes would be controlled in accordance with the provisions of 10 CFR 50.54(a).

- Plant Staff Qualifications (TS 6.3)
  - Plant Review and Audit (TS 6.5)
  - Procedures (TS 6.8.1)
  - Station Operating Records and Retention (TS 6.10)

The licensee has identified the following relocated requirements as "reductions in commitment," pursuant to the provisions of §50.54(a)(3):

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TS 6.5.2.7a Nuclear Safety Review Board (NSRB) review of safety evaluations,

TS 6.5.2.7i NSRB review of reports and minutes of the Plant Operations Review Committee (PORC),

TS 6.5.2.10a NSRB meeting minutes/review report distribution within 14 days.

These reductions in commitments, which are addressed by this evaluation, are identical to NQAP requirements already approved for the Watts Bar and Sequoyah nuclear plants (Ref. 10,11).

General regulatory guidance and national standards to which the licensee has committed are listed in Appendix B of the NQAP and, as such, constitute an integral part of the licensee's QA commitments.

Information relevant to relocation of the CTS requirements is contained in the enclosures to the licensee's submittal (Ref. 1). Justification for the items relocated to the NQAP is provided, primarily, in the licensee's response (Ref. 2) to the NRC's request for additional information (Ref. 12), which resulted from the inadequate justification provided in the original submittal.

# 3.1 Plant Staff Qualification (TS 6.3)

The proposed amendment (Ref. 1) was subsequently revised (Ref. 4), such that this TS requirement was retained, without reference to the NQAP. Consequently, it is outside the scope of this evaluation.

# 3.2 Plant Review and Audit (TS 6.5)

TS 6.5 provides requirements for the onsite review function (TS 6.5.1), the independent review function (TS 6.5.2), and the technical review and approval of procedures (TS 6.5.3).

The licensee has committed to Regulatory Guide (RG) 1.33, Revision 2, which endorses ANSI N18.7-1976 (Ref. 13) as a basis for complying with the Commission's regulatory requirements with regard to overall QA program requirements during the operational phase. Deletion c, some of the TS 6.5 requirements rely, in part, on the licensee's commitment to ANSI N18.7-1976 provisions, without duplicating them in the NQAP.

3.2.1 Onsite Review Function

TS 6.5.1 requirements for the onsite review function have been relocated intact to Section 9.9.8 of the NQAP. Relocation of these requirements is in accordance with AL 95-06 guidance.

# 3.2.2 Independent Review Function

TS requirements for the NSRB function (TS 6.5.2.1), composition (TS 6.5.2.2), consultants (TS

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6.5.2.4), meeting frequency (TS 6.5.2.5), and quorum (TS 6.5.2.6) have been deleted. The basis for deleting these TS requirements is that they duplicate the requirements of Section 4.3 of ANSI N18.7-1976, which is identified as a QA commitment in Appendix B of the NQAP which is controlled by 10 CFR 50.54(a).

TS requirements for NSRB qualification (TS 6.5.2.3), and authority (TS 6.5.2.9) have been relocated intact to Section 4.1.3.B.5 of the NQAP. Relocation of these requirements is in accordance with the guidance of AL 95-06.

TS requirements for audits performed under the cognizance of the NSRB (TS 6.5.2.8) have been relocated intact to Section 12.2.E.4 of the NQAP, with exception of the 30-day distribution requirement for audit reports. The distribution requirement is implicit in the licensee's commitment to RG 1.44, Revision 1, which endorses ANSI N45.2.12-1977 (Ref. 14) as a basis for complying with the Commission's regulatory requirements for establishing and implementing audit programs for nuclear power plants.

TS requirements for NSRB review (TS 6.5.2.7) and NSRB records (TS 6.5.2.10) have been relocated intact to the NQAP (Sections 4.1.3.B.5 and Appendix B respectively), with exceptions for the following "reductions in commitments."

#### 3.2.2.1 NSRB Review of Safety Evaluations

The licensee proposes that the scope of NSRB review of safety evaluations completed under the provisions of 10 CFR 50.59 be limited to representative safety evaluations, selected on the basis of safety significance. TS 6.5.2.7 currently requires review of all safety evaluations.

The licensee desires to have a uniform NSRB commitment in this area. The proposed NSRB scope of review is identical to that of the Watts Bar NSRB (Ref. 10) and the Sequoyah NSRB (Ref. 11).

The licensee states (Ref. 2) that the proposed approach is in keeping with the objectives of ANSI 18.7-1976, Section 4.3 regarding responsibilities of independent review organizations. That is, the NSRB function as an independent review organization is better fulfilled in assessing the safety evaluation program and process, rather than providing a third party review of all safety evaluations after the affected activities have been implemented.

The licensee further states that the onsite review function (PORC) reviews all safety evaluations prior to implementation and, thus, provides adequate in-line review of individual safety evaluations. While NSRB meetings may be as infrequent as once per 6 months (TS 6.5.2.5), the frequency of PORC meetings provides a more effective forum to identify safety issues prior to implementation.

The licensee states that the NSRB can provide a more comprehensive review of the overall safety evaluation process by focusing on the more safety-significant changes. as well as the overall implementation of the 10 CFR 50.59 program. The licensee emphasizes that limiting

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NSRB review to safety evaluations based on safety significance does not limit the scope of NSRB program oversight; all aspects of the §50.59 program, from initial screening through implementation of special requirements identified in safety evaluations fall within the scope of NSRB responsibility.

Finally, the licensee states that the proposed approach is consistent with its overall management philosophy of emphasizing self-assessment with comprehensive management oversight. As such, more effective NSRB oversight is achieved by focusing on broad, programmatic issues and effective monitoring of process controls. The licensee believes that this approach represents an improved methodology for NSRB review of the management controls governing plant changes.

Evaluation: The licensee's proposed alternative to limit the scope of NSRB review of safety evaluations completed under the provisions of 10 CFR 50.59 on a sample basis meets the intent of ANSI 18.7-1976, Section 4.3, and provides adequate in-line review of individual safety evaluations. Further, the proposed approach does not limit the scope of NSRB program oversight. Therefore, the licensee's proposal is acceptable.

#### 3.2.2.2 NSRB Review of PORC Minutes

The licensee proposes to delete the TS 6.5.2.7i requirement for NSRB review of minutes of the onsite review committee.

The licensee states (Ref. 2) that PORC minutes will continue to be distributed to the NSRB for review, as required by Section 9.9.8.B.6 of the NQAP; only the formal NSRB review requirement is deleted.

Evaluation: There is no specific regulatory guidance (e.g., RG 1.33) for this activity; the proposed deletion is consistent with the NSRB requirements for Watts Bar and Sequoyah. Accordingly; the licensee's proposal to delete formal NSRB review is acceptable.

#### 3.2.2.3 NSRB Meeting Minutes Distribution

The licensee proposes to extend the TS 6.5.2.10a and b requirements for distribution of NSRB meeting minutes and review reports from 14 days to 30 days.

The licensee states that the NSRB is subject to the requirements of the corrective action program, which requires prompt identification of safety significant issues for evaluation and subsequent resolution. Consequently, the 14-day requirement has no bearing on the prompt identification and resolution of safety issues.

Evaluation: There is no specific regulatory guidance (e.g., RG 1.33) for the 14-day period; the proposed extension of the distribution period is consistent with Section 5.5.2 of the Standard Technical Specifications (Ref. 5); the proposed extension is consistent with the NSRB requirements for Watts Bar and Sequoyah. Accordingly, the licensee's proposed extension is



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Evaluation: The licensee's proposed alternative to limit the scope of NSRB review of safety evaluations completed under the provisions of 10 CFR 50.59 on a sample basis meets the intent of ANSI 18.7-1976, Section 4.3, and provides adequate in-line review of individual safety evaluations. Further, the proposed approach does not limit the scope of NSRB program oversight. Therefore, the licensee's proposal is acceptable.

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Evaluation: There is no specific regulatory guidance (e.g., RG 1.33) for this activity; the proposed deletion is consistent with the NSRB requirements for Watts Bar and Sequoyah. Accordingly; the licensee's proposal to delete formal NSRB review is acceptable.

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Evaluation: There is no specific regulatory guidance (e.g., RG 1.33) for the 14-day period; the proposed extension of the distribution period is consistent with Section 5.5.2 of the Standard Technical Specifications (Ref. 5); the proposed extension is consistent with the NSRB requirements for Watts Bar and Sequoyah. Accordingly, the licensee's proposed extension is

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acceptable.

#### 3.3 Technical Review and Approval of Procedures

TS 6.5.3 requirements have been relocated intact to Section 9.9.9 of the NQAP. Relocation of these requirements are in accordance with the guidance of AL 95-06.

#### 3.4 Procedure Review

The TS 6.8.1 requirements for plant procedures have been relocated intact to Section 9.9.9 of the NQAP. Relocation of these requirements is in accordance with the guidance of AL 95-06.

#### 3.5 Station Operating Records and Retention

The licensee has committed to RG 1.88, Revision 2, which endorses ANSI N45.2.9-1974 (Ref. 15) as a basis for complying with the Commission's regulations with regard to collection, storage, and maintenance of QA records for nuclear power plants.

TS 6.10.1 record requirements and retention periods have been relocated to Appendix B of the NQAP, which either explicitly identifies record requirements or references the generic requirements of ANSI N45.2.9, Appendix A. Relocation of these requirements is in accordance with the guidance of AL 95-06.

#### 4.0 SUMMARY

The licensee proposed relocation of the above TS administrative control requirements to its QAP. Subsequent changes to these requirements will be controlled through the established QA program change control process in 10 CFR 50.54(a). Revision 7 of the licensee's QA program description (Ref. 7) should be implemented concurrent with implementation of the proposed amendment. Therefore, the staff finds the proposed amendment acceptable.

#### 5.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Alabama State official (Kirk Whatley) was notified of the proposed issuance of the amendment. The State official had no comments.

#### 6.0 ENVIRONMENTAL CONSIDERATION

The amendments change requirements with respect to record keeping, reporting, or administrative procedures or requirements. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (61 FR 50346). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.





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### 7.0 CONCLUSION

The Commission has concluded, based upon the considerations discussed above, that: (1) the amendment does not (a) significantly increase the probability or consequences of an accident previously evaluated, (b) create the possibility of a new or different kind of accident from any previously evaluated, or (c) significantly reduce a margin of safety, and therefore, the amendment does not involve a significant hazards consideration; (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner; (3) such activities will be conducted in compliance with the Commission's regulations; and (4) issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

#### 8.0 <u>REFERENCES</u>

- 1. TVA letter (P. Salas) to the USNRC, "Browns Ferry Nuclear Plant (BFNP), Units 1, 2, 3 TS Change 372 Section 6, Administrative Controls," June 6, 1996.
- 2. TVA letter (M.J. Burzynski) to the USNRC, "Response to Request for Additional Information - TS Change Request 19 for Sequoyah Nuclear Plant Units 1 and 2, Change Request TS-372 for Browns Ferry Units 1, 2, 3 and TVA Nuclear QA Plan TVA-NQA-PLN89-A, Revision 7," September 26, 1997.
- 3. TVA letter (T.E. Abney) to the USNRC, "BFNP, Units 1, 2, 3 TS Change 372 -Section 6, Administrative Controls - Revision 1 ...", January 23, 1998.
- 4. TVA letter (T.E. Abney) to the USNRC, "BFNP, Units 1, 2, 3 TS Change 372, Administrative Controls Revision 2," May 19, 1998.
- 5. NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4," January 1991.
- 6. Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors," July 22, 1993 (58 FR 39132).
- 7. TVA Quality Assurance Plan (TVA-NQA-PLN89-A), Revision 7, submitted by letter dated October 11, 1996.
- 8. Technical Specifications, July 19, 1995 (60 FR 36957).
- 9. Administrative Letter 95-06, "Relocation of Technical Specifications Administrative Controls Related to Quality Assurance," December 12, 1995.
- 10. TVA Quality Assurance Plan (TVA-NQA-PLN89-A), Revision 6, submitted by letter dated September 1, 1995.
- 11. NRC letter to TVA (J.A. Scalice), "Issuance of Technical Specification Amendments for

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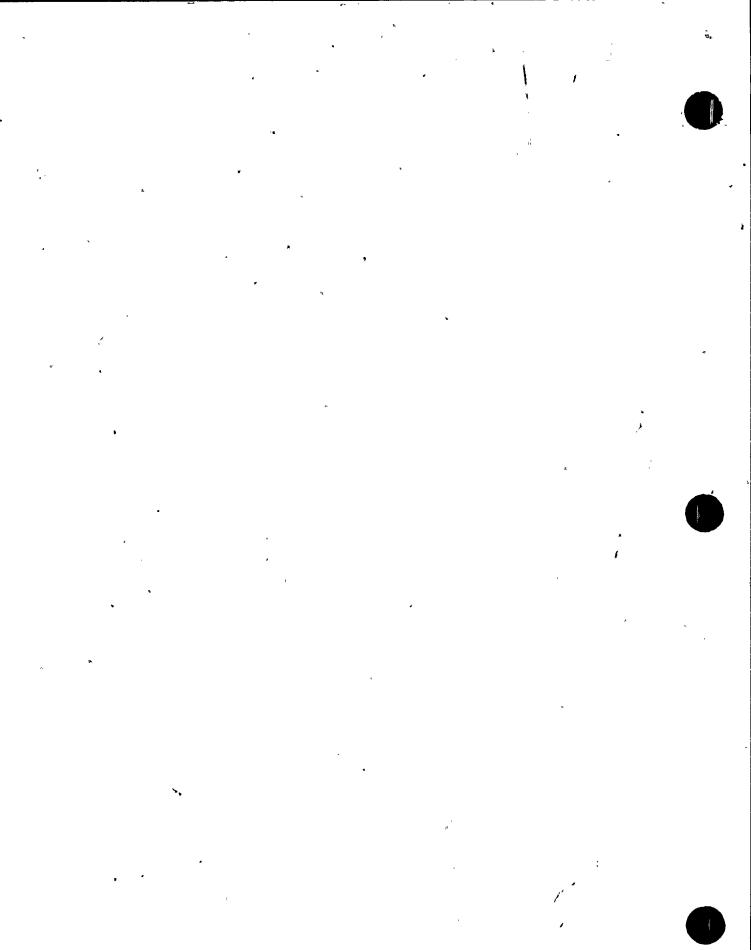
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the Sequoyah Nuclear plant, Units 1 and 2 ...," June 26, 1998.

- 12. NRC letter to TVA (O.D. Kingsley), "Request for Additional Information Change Request TS 95-19 for Sequoyah Units 1 and 2 and Change Request TS-372 for Browns Ferry Nuclear Plant Units 1, 2, and 3," June 23, 1997.
- 13. ANSI N18.7-1976, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants," February 19, 1976. (Endorsed by RG 1.33, Revision 2, February 1978.)
- 14. ANSI N45.2.12-1977, "Requirements for Auditing of Quality Assurance Programs for Nuclear Power Plants," November 17, 1977. (Endorsed by RG 1.144, Revision 1, September 1980.)
- 15. ANSI N45.2.9-1975, "Requirements for Collection, Storage, and Maintenance of Quality Assurance Records for Nuclear Power Plants," June 6, 1974. (Endorsed by RG 1.88, Revision 2, October 1976.)

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