



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

SEP 23 1991

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

In the Matter of)	Docket Nos. 50-259	50-390
Tennessee Valley Authority)	50-260	50-391
)	50-296	50-438
)	50-327	50-439
)	50-328	

TVA NUCLEAR QUALITY ASSURANCE PLAN (TVA-NQA-PLN89-A, REVISION 1) - CHANGES

Changes to TVA's Nuclear Quality Assurance Plan (Plan), provided as an enclosure, are submitted in accordance with the requirements of 10 CFR 50.54(a)(3) and 10 CFR 50.55(f)(3). These changes are in regard to:

- A. The commitment to ANSI N18.7-1976/ANS 3.2 as endorsed by NRC Regulatory Guide 1.33, Revision 2;
- B. The commitment to ANSI N45.2.2 as endorsed by NRC Regulatory Guide 1.38, Revision 2;
- C. Realignment of audit responsibilities;
- D. Clarification of requirements to review or monitor programs and features; and
- E. Clarification of design output coordination with users.

These changes describe alternatives and/or provide clarification of the Plan and do not reduce commitments previously accepted by NRC. Accordingly, these changes will also be submitted in TVA's annual Plan update. Additional changes resulting from a recent shift in organization responsibilities will be submitted in the near future.

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If you have any questions or if we can be of any assistance, please telephone P. J. Hammons at (615) 751-2736.

Very truly yours,

TENNESSEE VALLEY AUTHORITY



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Enclosure

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ENCLOSURE

NQA PLAN CHANGES

- A. The existing approved NQA Plan in reference to ANSI N18.7-1976/ANS-3.2, Section 5.2.15 (refer to Section 6.1.2.E, page 26 of 112; and Appendix B, page 92 of 112 of the subject document) reads as follows:

1. Present Wording (page 26 of 112):

6.1.2.E Review of Operational Phase Procedures

Operational phase site procedures and instructions shall be periodically reviewed by an individual knowledgeable in the area affected by the procedure to determine if changes are necessary. This periodic review shall be performed and documented at least once every two years or, for procedures that are used less frequently than every two years, the review shall be performed and documented prior to use. A general revision of a procedure is an acceptable means of performing the review.

Change to read:

6.1.2.E Review of Operational Phase Procedures

Operational phase site procedures and instructions shall be reviewed to ensure that specific known changes in source documents or changes identified through usage are included as necessary and in a timely manner. The following mechanisms ensure that appropriate procedure reviews are conducted:

1. Plant modification program
2. Resolution of issues identified by QA, NRC, nuclear experience review, and corrective action program
3. Technical specification and FSAR update reviews
4. Source document program and process for administering site procedures
5. Testing program

2. Present Wording (page 92 of 112 - NRC Regulatory Guide 1.33):

4. Section 5.2.15 - Minor changes to documents are processed as delineated in Section 6.1.2.F3 of this plan.

Change to read:

4. Section 5.2.15 - The guidelines of this section are accepted with the following alternatives:
- a. Minor changes to documents are processed as delineated in Section 6.1.2.F3 of this plan.

- b. TVA has programmatic controls in place that make a biennial review process unnecessarily duplicative. These programmatic controls ensure procedures are periodically reviewed and maintained current when pertinent source material is revised; the plant design changes; and/or any deficiencies occur. TVA has determined that this approach better addresses the purpose of the biennial review process and that, from a technical and practical standpoint, is better suited to ensure the validity of operational phase site procedures and instructions.

Justification for Changes:

TVA considers that a dynamic process is better suited to maintaining procedures in an accurate and useful condition and that the static biennial review process specified by ANSI N18.7 may not be suitable in all cases.

TVA has established effective controls to ensure that potential procedural impact is assessed and revisions are made based on input from a number of different programs. Results of verification activities (i.e., reviewing, monitoring, auditing) will be used to determine the effectiveness of programmatic controls in maintaining procedures current.

The following mechanisms provide adequate assurance that procedure revisions and changes are made in a timely manner:

1. The plant modification program requires procedures necessary to declare a system operable be reissued prior to returning a system to service and prior to completion of the workpackage.
2. Procedure changes or revisions are within the scope of issues readily addressable by TVA's corrective action program. This includes Significant Corrective Action Reports (SCARs) and the administrative control programs identified as part of the corrective action program.
3. Revisions to Technical Specifications and the FSAR require evaluation for impact on procedures and, when appropriate, result in the initiation of procedure changes.
4. Corrective actions in response to regulatory issues address required procedure changes or revisions. This includes responses to violations, generic letters, and other regulatory concerns.
5. The source document program establishes processes for identifying, documenting, and tracking requirements and commitments applicable to activities that are implemented through procedural documents.
6. The Nuclear Experience Review program evaluates experience reports generated internally and received from nuclear industry sources such as NRC, INPO, nuclear vendors and equipment suppliers, and architect engineers and constructors. This evaluation identifies applicable procedures and generates any required procedure changes.

7. The requirements governing the administration of site procedures make clear that procedures are followed as written, or that approval of necessary changes must be obtained before proceeding.
8. The Incident Investigation and Root Cause Analysis Program requires an investigation team to evaluate the adequacy of procedures during the analysis of the event. The investigation team also recommends appropriate corrective action and recurrence control.
9. "Accept-as-is" or "repair" dispositions on non-conforming items require site engineering to provide technical justification. Procedure changes or revisions required as a result of the disposition are considered during the technical justification review.
10. The testing program requires all testing personnel to ensure that procedures are precisely followed. If performance of a step could result in personnel injury, damage to plant equipment, or failure to accomplish the test objective, the test is stopped until the problem is addressed. This would include revisions or changes to procedures.
11. Quality Assurance audit findings are evaluated for extent of condition and contributing factors. Inadequate procedures that contribute to audit findings are identified as part of the normal audit process.

In addition, the Nuclear Power group currently has a total of 12,930 procedures for Sequoyah, Browns Ferry, and Watts Bar sites which are currently subject to the two-year review process. The average processing time for each procedure is 29 hours. Relieving the burden of conducting half of these reviews on an annual basis would result in an annual savings of 187,485 manhours which could be more effectively utilized.

SUMMARY

As is evidenced by the number of programmatic controls discussed above that would ensure timely and effective procedure input and revision, TVA considers the biennial review process to be unnecessarily redundant. The impact of the biennial review on plant resources reduces TVA's ability to concentrate on issues of greater significance to plant safety, thereby making its elimination an enhancement to plant safety.

- B. The existing approved NQA Plan in reference to ANSI N45.2.2 (refer to Appendix B, pages 94 and 95 of 112 of the subject document) reads as follows:
 1. Present Wording (page 94 of 112 - NRC Regulatory Guide 1.38):
 4. Tubing and piping shall have end caps or plugs while in storage unless specified otherwise by engineering specification. End caps or plugs are not mandatory on tube or pipe fittings provided

the requirements of TVA internal procedures to store under cover with protection from the elements are met. These materials are required to be in a visually clean condition and free of visually detectable defects prior to installation.

Change to read:

4. Tubing and piping materials shall have end caps or plugs while in storage unless specified otherwise by engineering specification. End caps or plugs are not mandatory on tube or pipe fittings provided the requirements of TVA internal procedures to store under cover with protection from the elements are met. These materials are required to be in a visually clean condition and free of visually detectable defects prior to installation.

Justification for Changes:

Clarification that materials such as fittings are addressed by the first sentence.

2. Add an alternative (page 95 of 112 - NRC Regulatory Guide 1.38)
 13. Sections 7.3.2 and 7.4.2 - Use of hoisting equipment beyond its rated load is acceptable when specifically approved with technical justification by engineering.

Justification for Changes:

To emphasize that TVA's engineering organization has authority to assign load limitations for hoisting equipment based on safety significance of end use application.

- C. The existing approved NQA Plan in reference to responsibility for auditing (refer to Section 4.1.3.C.7.a.4, page 15 of 112 of the subject document) reads as follows:

1. Present Wording:

4. Review and audit QA programs of TVA organizations which support quality-related activities.

Change to read:

4. Review and audit QA programs of TVA organizations which support quality-related activities, including the site quality manager organizations.
2. Add to Section 4.1.3.C.7.c (page 18 of 112)
 12. Planning, conducting, and reporting the results of audits and following up identified adverse conditions to ensure appropriate corrective action has been taken.

13. Performing audits of engineering, construction, and operations activities (except supplier nuclear fuel-related activities) to determine compliance with QA program requirements.

Justification for Changes:

To show realignment of audit responsibilities within Nuclear Quality Assurance.

- D. The existing approved NQA Plan in reference to responsibility to review or monitor (refer to Sections 4.1.3.C.7.b.14, page 17 of 112; 5.1.B, page 21 of 112; and 6.1.3.B and C, page 27 of 112 of the subject document) reads as follows:

1. Present Wording:

- 4.1.3.C.7.b.14 Reviews and concurs with TVA nuclear fuel QA program and TVA quality-related programs.

Change to read:

- 4.1.3.C.7.b.14 Reviews or monitors TVA nuclear fuel QA programs and TVA quality-related programs.

2. Present Wording (first paragraph):

- 5.1.B The requirements shall also apply to TVA identified quality-related programs and features which are important to the continued reliable operation of TVA's nuclear facilities. Organizations responsible for these programs and features shall determine the extent to which these requirements apply and develop and document applicable NQAP elements and the levels of verification required. Technical requirements related to engineering design are specified by the Vice President, Nuclear Projects. NQA shall review and concur with these programs and features. The program procedures shall be included in NPS documents.

Change to read:

- 5.1.B The requirements shall also apply to TVA identified quality-related programs and features which are important to the continued reliable operation of TVA's nuclear facilities. Organizations responsible for these programs and features shall determine the extent to which these requirements apply and develop and document applicable NQAP elements and the levels of verification required. Technical requirements related to engineering design are specified by the Vice President, Nuclear Projects. NQA shall review or monitor these programs and features. The program procedures shall be included in NPS documents.

3. Present Wording:

6.1.3.B The Vice President, NAL&F as delegated to the Manager, NQA shall:

1. Perform reviews or monitoring of NPS documents that implement the NQAP and,
2. Ensure that reviews are conducted by personnel knowledgeable in QA requirements.

6.1.3.C Affected NP organizations are responsible for implementing the requirements of the QA program through written procedures and instructions.

Change to Read:

6.1.3.B The Vice President, NAL&F as delegated to the Manager, NQA shall:

1. Perform reviews or monitoring of NPS documents that implement the NQAP and,
2. Verify through monitoring or other means that reviews are conducted by personnel knowledgeable in QA requirements.

6.1.3.C NP organizations are responsible for:

1. Implementing the requirements of the QA program through written procedures and instructions.
2. Ensuring reviews of NPS documents that implement the NQAP are conducted by personnel knowledgeable of QA requirements.

Justification for Changes:

To allow NQA the additional flexibility of monitoring programs and features. This change supports other previously accepted changes that clearly establish line organization responsibility for technical and QA requirements. To clarify that monitoring or other means is an acceptable method of verifying procedure adequacy. To clarify the NQA's present emphasis of placing primary responsibility on line organizations for QA requirements.

E. The existing approved NQA Plan in reference to design output (refer to Section 7.2.1.C, page 33 of 112 of the subject document) reads as follows:

1. Present Wording:

7.2.1.C Measures shall be established and implemented to ensure that design output documents appropriately identify engineering requirements that apply to plant activities, and to ensure that plant personnel are made aware of engineering requirements that could affect the performance and scope of their responsibilities before those engineering requirements are approved.

Change to read:

7.2.1.C Measures shall be established and implemented to ensure that design output documents appropriately identify engineering requirements that apply to plant activities, and to ensure that plant personnel are made aware of engineering requirements that could affect the performance and scope of their responsibilities before those engineering requirements are implemented.

Justification for Change:

To clarify that engineering requirements are communicated to user organizations prior to implementation.