



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402-2801

March 22, 2000

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 |        |

TENNESSEE VALLEY AUTHORITY (TVA) NUCLEAR QUALITY ASSURANCE (NQA) PLAN - (TVA-NQA-PLN89-A) - PROPOSED REVISION - PLANT OPERATING REVIEW COMMITTEE (PORC) AND PLANT REVIEWS STANDARDIZATION

TVA proposes to revise the current NQA Plan to standardize PORC and plant review requirements for the three TVA nuclear plant sites. This would eliminate the existing site-unique requirements and establish standard requirements for plant reviews and PORC. It is advantageous to TVA to have uniform review requirements for each of the nuclear plants. Consequently, common review programs and procedures can be implemented. This proposal is provided in accordance with 10 CFR 50.54(a)(3) and 10 CFR 50.55(f)(3).

The proposed changes are shown in Enclosure 1 as a marked-up copy of the applicable sections of the current NQA Plan, Revision 9. Also, this enclosure contains a typed copy. Enclosure 2 itemizes the changes from the NQA Plan and provides a comparison of the NQA Plan provisions with the Standard Technical Specifications and Section 13.4 of the Standard Review Plan.

This proposal, in part, represents a reduction in commitment. However, TVA's present NQA Plan commitment to Regulatory Guide 1.33 and ANSI N18.7, Section 4.4, "Review Activities of the Onsite Operating Organization," continues to be met.

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The proposal will be incorporated into the NQA Plan once approved by NRC and included as appropriate in each plant's UFSAR as required by 10 CFR 50.71(e). If you have questions, please contact R. M. Brown at (423) 751-6673.

Sincerely,

*Ralph H. Shell*

*for*  
Mark J. Burzynski  
Manager  
Nuclear Licensing

Enclosure

cc (Enclosure):

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Browns Ferry Nuclear Plant  
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cc: Continued on page 3

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cc: NRC Resident Inspector  
Sequoyah Nuclear Plant  
2600 Igou Ferry Road  
Soddy Daisy, Tennessee 37379

NRC Resident Inspector  
Watts Bar Nuclear Plant  
1260 Nuclear Plant Road  
Spring City, Tennessee 37381

**ENCLOSURE 1**

**Tennessee Valley Authority  
NQA Plan - Applicable Section  
Both Marked-Up and Typed Copies**

MARK-UP SHOWING CHANGES  
 PROPOSED TO STANDARDIZE REQUIREMENTS

9.9 Plant Reviews

9.9.1 General

The plant staff organization provides reviews of day-to-day activities to ensure they are conducted in a safe manner. Technical Reviewers Qualified Reviewers provide for reviews of procedures, procedure changes, and proposed changes to structures, systems, and components that affect nuclear safety in their area of expertise.

The PORC is a multidisciplined committee responsible for providing an oversight review of documents required for the safe operation of the plant. PORC advises the Plant Manager on all matters related to nuclear safety.

9.9.2 Plant Reviews

A. Activities which affect nuclear safety shall be conducted as follows:

1. Proposed changes or modifications to plant nuclear safety-related structures, systems, and components shall be reviewed in accordance with approved written procedures. Such modifications shall be reviewed by an individual/group other than the individual/group which designed the modification, but who may be from the same organization as the individual/group which designed the modification. Proposed modifications to plant nuclear safety-related structures, systems, and components shall be approved by the Plant Manager, or designee, prior to implementation.
2. Written procedures shall be established, implemented, and maintained covering the ~~activities referenced below~~ following activities:
  - a. The applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978 and in accordance with Appendix B of this Plan;
  - b. The emergency operating procedures which implement NUREG-0737 and NUREG-0737, Supplement 1, as stated in Generic Letter 82-33
  - ~~c.~~ c. Surveillance and test activities of safety-related equipment
  - d. Radiological Emergency Plan Implementation
  - ~~e.~~ Security Plan Implementation
  - ~~f.~~ f. Offsite Dose Calculation Manual (ODCM) Implementation
  - ~~f. g.~~ Fire Protection Program Implementation
  - h. Process Control Program Implementation (radwaste packaging and shipping); and

deleted —

deleted —

*deleted* — i. Limitations on the amount of overtime worked by individuals performing safety-related functions in accordance with NRC policy statement on working hours (Generic Letter No. 82-12)

*deleted* — j. Refueling (SQN only)

*e. k* Quality Assurance Program for effluent and environmental monitoring, using the guidance contained in Regulatory Guide 4.15, December 1977, or Regulatory Guide 1.21, Revision 1, 1974 and Regulatory Guide 4.1, Revision 1, 1975

*deleted* — l. Administrative procedures which control technical and cross-disciplinary review (BFN only)

*g. m* Radiation Protection Program (WBN only) *e*

*i. n* In-Plant Radiation Monitoring (WBN only) *e*

*deleted* — o. Radwaste Treatment System (WBN only)

3. Procedures required by Section 9.9.2.A.2, procedures <sup>and programs</sup> ~~describing selected programs in~~ site-specific technical specifications, and other procedures which affect plant nuclear safety, and changes (other than editorial or typographical changes) thereto, shall be prepared, <sup>and</sup> reviewed, <sup>and</sup> approved, <sup>in accordance with approved administrative procedures prior to implementation except as specified in Section 9.9.2.A.6.</sup> Procedures or procedure changes shall be reviewed by a qualified individual knowledgeable in the subject matter other than the preparer. The reviewer may be from the same or different organization. Procedures not reviewed by PORC shall be approved by the responsible management in accordance with established program requirements. ~~The Plant Manager, or designee, shall approve designated administrative procedures.~~ <sup>Procedures reviewed by PORC shall be approved by the Plant Manager, or designee.</sup>

4. Qualified Reviewers ~~(Technical Reviewers at WBN)~~ responsible for reviews performed in accordance with Section 9.9.2.A.3 shall be designated and qualified, ~~and shall function and report in accordance with approved written procedures.~~ Qualifications of ~~technical reviewers~~ <sup>qualified reviewers</sup> shall be as specified in written procedures. ~~(For WBN, the Technical Reviewers shall meet qualifications as recommended in Sections 4.2, 4.3.1, 4.4, 4.5.1, or 4.6 of ANSI N18.1-1971. Each such review shall include a determination of whether additional cross-disciplinary review is necessary. If deemed necessary, such review shall be performed by review personnel of the appropriate discipline. For SQN and WBN, each such review shall also determine whether an unreviewed safety question is involved pursuant to 10 CFR 50.59. Items 9.9.2.A.2, a and b are not subject to the 10 CFR 50.59 review as they are governed by 10 CFR 50.54(a) and (p) respectively.)~~ <sup>and approved administrative procedures.</sup>

*insert*  
5. Procedures and intent change to these procedures shall be reviewed to

For WBN, in addition to the qualified reviewer responsibilities, the technical reviewer shall be responsible for the technical review of the following. This review shall also determine whether these items constitute an unreviewed safety question as defined in 10 CFR 50.59.

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- a. Proposed changes and modifications to unit systems or equipment that affect nuclear safety;
- b. Proposed tests and experiments that affect nuclear safety; and
- c. Proposed changes to TSs, their bases, and the Operating License.

deleted

5. Each procedure of Section 9.9.2.A.2 shall be approved by the Plant Manager or designee in accordance with approved administrative procedures prior to implementation, except as specified in Section 9.9.2.A.6 below, and for WBN must also be reviewed periodically as set forth in administrative procedures.

6. Temporarily approved changes to procedures of Section 9.9.2.A.2 shall be made in accordance with ANSI N18.7-1976/ANS 3.2, as modified in Appendix B of this Plan. Such changes shall be documented and reviewed and approved in accordance with Sections 9.9.2.A.3 and 9.9.2.A.2 within 14 days and in accordance with approved administrative procedures.

B. Plant Operations Review Committee

Each plant shall have a Plant Operations Review Committee (PORC) which shall function to advise the Plant Manager in all matters related to nuclear safety. This advisory function shall be performed by the PORC acting in a formal meeting. PORC shall be organized and shall conduct business as described below: <sup>periodically and as situations demand.</sup>

1. Composition <sup>The Chairman and members shall be appointed in writing by the Plant Manager.</sup>

The composition of PORC shall be as follows:

- Chairman: Plant Manager at BFN and SQN (Operations Manager at WBN)
- Member: Operations (Manager (SQN only) representative(s))
- Member: Operations Superintendent (BFN only)
- Member: Maintenance and Modifications (Manager representative(s))
- Member: Radiological and Chemistry Control (RADCHEM) (Manager representative(s))
- Member: System Engineering Manager
- Member: Site Quality Manager
- Member: Engineering Representative (SQN and WBN only)
- Member: Engineering and Materials Manager (BFN only)

2. Alternates

*Plant Manager*  
Alternate chairmen and members shall be appointed in writing by the ~~PORC Chairman~~. For BFN, the alternate chairman may be the Plant Operations Manager, Assistant Plant Manager, or the System Engineering Manager.

3. Meeting Frequency

The PORC shall meet at least once per calendar month and as convened by the PORC Chairman or ~~his~~ designated alternate.

4. Quorum

*three of the four functional area representatives.*  
The PORC ~~quorum~~ shall consist of the Chairman or ~~his~~ designated alternate and four members (five members at BFN) of which two may be alternates.

No more than two alternate members can vote.

5. Reporting

The PORC reports to the Plant Manager on ~~all~~ <sup>its</sup> activities and findings. The meeting minutes shall serve as the official correspondence from PORC to the Plant Manager. PORC recommendations shall be recorded in the minutes and submitted to the Plant Manager and NSRB.

6. Function

a. Advise the Plant Manager on ~~all~~ matters related to nuclear safety;

*c.b.* Provide written notification to the Site Vice President and the NSRB of any disagreement (safety significant disagreement at WBN) between the PORC and the Plant Manager within 24 hours. The Plant Manager shall have responsibility for resolution of such disagreements.

*insert*  
b. Recommend to the Plant Manager approval or disapproval of items considered under Section 9.9.2.B.7; and

7. Responsibilities

*used to conduct, as a minimum, reviews of the*  
The PORC shall be responsible for the activities listed below following. The PORC may delegate the performance of reviews, but shall maintain cognizance over and responsibility for them, e.g., subcommittees.

a. Review of the following:

*a. 11* The applicable administrative procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978



insert  
c. Physical Security Plan

- b. (2) The emergency operating procedures which implement NUREG-0737 and NUREG-0737, Supplement 1, as stated in Generic Letter 82-33
- deleted (3) Fire Protection Program Administrative Procedures and Fire Protection Reports
- e. (4) Offsite Dose Calculation Manual (ODCM)
- d. (5) Radiological Emergency Plan (and implementing procedures of the Radiological Emergency Plan for BFN only)
- deleted (6) Regulatory Overtime Restrictions Procedure
- deleted (7) Implementing procedures of the Industrial Security Program (BFN only)
- f. (8) Adequacy of the Process Control Program and Offsite Dose Calculation Manual at least once every 24 months (BFN only) (radwaste packaging and shipping)
- deleted (9) Administrative procedures and changes thereto for the control of the technical and cross-disciplinary review of all procedures required by Section 9.9.2.A.2 (BFN only)
- deleted (10) Safe Shutdown Instructions (BFN only)
- deleted (11) Process Control Program (PCP) (BFN and WBN only)
- deleted (12) Radwaste Treatment System (WBN only)
- deleted (13) Radiation Protection Program (WBN only)
- deleted (14) In-Plant Radiation Monitoring (WBN only)
- deleted (15) Inservice Inspection Program (WBN only)
- deleted b. Review of other site procedures as determined by PORC or the Plant Manager.
- deleted c. Review of safety evaluations for tests and experiments to be conducted under the provisions of 10 CFR 50.59.
- i. d. Review of all <sup>Selected</sup> safety evaluations for (a) procedures and (b) changes to procedures, programs, equipment, systems, ~~or~~ and facilities which involve an unreviewed safety question. (SQN) and WBN only to verify that such actions did not constitute
- h. e. Review of proposed changes to TSS; Technical Requirements Manual; their bases; amendments to the Operating License; and associated safety evaluations for these
- insert g. Additional PORC reviews specifically required by site-specific technical specifications.

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- f. Review of violations of Technical Specifications (investigate reported or suspected incidents involving safety questions or violations of the Technical Specifications for BFN only).
- g. Review of reportable events as required by 10 CFR 50.73. At BFN, also include review of unusual events, operating anomalies, and abnormal performance of plant equipment.
- h. Special reviews, investigations, or analyses and reports thereon as requested by the Plant Manager or the NSRB.
- i. Review of any accidental, unplanned, or uncontrolled radioactive release and associated reports. PORC will forward reports covering the evaluation and recommendations to prevent recurrence to the Site Vice President (Chief Nuclear Officer and Executive Vice President, TVA Nuclear, for BFN) and to the NSRB.
- j. Review of unit operations to detect potential nuclear safety hazards. Items that may be included in this review are NRC inspection reports, QA audit, NSRB audit results, American Nuclear Insurer (ANI) inspection results, significant corrective action documents, and Operations Logs. (BFN and SQN only)
- k. Review of administrative procedures describing selected programs in site-specific technical specifications (WBN only).
- l. Review of selected safety evaluations for (a) procedures and (b) changes to procedures, equipment, systems, or facilities to verify that such actions did not constitute an unreviewed safety question. (SQN and WBN only).
- m. Review of all safety evaluations for modifications to structures, systems, or components that affect nuclear safety to verify that such actions did not constitute an unreviewed safety question as defined in 10 CFR 50.59, or requires a change to the Technical Specifications. (BFN only)
- n. Review changes to the radwaste treatment system. (BFN only).
- o. Review of the Nuclear Quality Assurance Plan sections applicable to PORC.

9.9.3 Records

deleted

A. For WBN, written records of reviews of items considered under Section 9.9.2.A.4 shall be maintained in accordance with approved procedures.

B. The PORC shall maintain written minutes of each PORC meeting that, as a minimum, document the results of its activities. Copies shall be provided to the Site Vice President and the NSRB. At a minimum, the PORC minutes shall include:

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1. Results of the activities conducted under the provisions of Section 9.9.

2. Recommended approval or disapproval of items considered under Section 9.9.2.B.7;

3. Determination of whether each item considered under Sections 9.9.2.B.7.c, .d, .e, .l, and .m constitutes an unreviewed safety question as defined in 10 CFR 50.59.

*deleted*

10.0 ADVERSE CONDITIONS

10.1 General

Measures shall be established to ensure that items that do not conform to requirements are controlled to prevent their inadvertent installation or use. Adverse conditions, including nonconforming items or nonhardware problems such as failure to comply with operating license, technical specifications, or procedures, shall be identified, evaluated, corrected, tracked, trended, and when required, reported to appropriate levels of management. Procedures or instructions implementing the corrective action program shall establish the criteria for documenting and tracking adverse conditions.

10.2 Program Elements

10.2.1 Control of Nonconforming Items

- A. Organizations responsible for items determined to be nonconforming during receipt inspection, construction, maintenance, modifications, or operations shall identify (physical identification) and segregate the nonconforming items from acceptable items to prevent further processing, delivery, installation, or inadvertent use. When segregation is not practical, tagging, marking, or other means of identification is acceptable.
- B. In cases where a nonconforming item is needed for use prior to correcting the nonconformance, a conditional release request document is required. The conditional release request document requires appropriate reviews and approvals. In addition, for equipment to be energized, operated, or pressurized an evaluation and justification is required.

10.2.2 Corrective Action For Adverse Conditions

- A. TVAN organizations and onsite non-TVAN service organizations performing quality-related activities at nuclear facilities shall promptly identify and resolve adverse conditions.
- B. Minor deficiencies which may be brought into compliance within an acceptable timeframe shall be corrected on the spot in accordance with established instructions.

## 9.9 Plant Reviews

### 9.9.1 General

The plant staff organization provides reviews of day-to-day activities to ensure they are conducted in a safe manner. Qualified Reviewers provide for reviews of procedures, procedure changes, and proposed changes to structures, systems, and components that affect nuclear safety in their area of expertise.

The PORC is a multidisciplined committee responsible for providing an oversight review of documents required for the safe operation of the plant. PORC advises the Plant Manager on matters related to nuclear safety.

### 9.9.2 Plant Reviews

A. Activities which affect nuclear safety shall be conducted as follows:

1. Proposed changes or modifications to plant nuclear safety-related structures, systems, and components shall be reviewed in accordance with approved written procedures. Such modifications shall be reviewed by an individual/group other than the individual/group which designed the modification, but who may be from the same organization as the individual/group which designed the modification. Proposed modifications to plant nuclear safety-related structures, systems, and components shall be approved by the Plant Manager, or designee, prior to implementation.
2. Written procedures shall be established, implemented, and maintained covering the following activities:
  - a. The applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978 and in accordance with Appendix B of this Plan;
  - b. The emergency operating procedures which implement NUREG-0737 and NUREG-0737, Supplement 1, as stated in Generic Letter 82-33;
  - c. Security Plan implementation;
  - d. Radiological Emergency Plan Implementation;
  - e. Offsite Dose Calculation Manual;
  - f. Fire Protection Program Implementation;
  - g. Radiation Protection Program;

- h. Process Control Program Implementation (radwaste packaging and shipping); and
  - i. In-Plant Radiation Monitoring.
3. Procedures required by Section 9.9.2.A.2, procedures and programs required by site-specific technical specifications, and other procedures which affect plant nuclear safety, and changes (other than editorial or typographical changes) thereto, shall be prepared and reviewed in accordance with approved administrative procedures prior to implementation except as specified in Section 9.9.2.A.6.

Procedures or procedure changes shall be reviewed by a qualified individual knowledgeable in the subject matter other than the preparer. The reviewer may be from the same or different organization. Procedures not reviewed by PORC shall be approved by the responsible management in accordance with established program requirements. Procedures reviewed by PORC shall be approved by the Plant Manager, or designee.

- 4. Qualified Reviewers responsible for reviews performed in accordance with Section 9.9.2.A.3 shall be designated and qualified. Qualifications of qualified reviewers shall be as specified in written procedures. Such reviews shall include a determination of whether additional cross-disciplinary review is necessary. If deemed necessary, such review shall be performed by review personnel of the appropriate discipline.
- 5. Procedures and intent changes to these procedures shall be reviewed to determine whether an unreviewed safety question is involved pursuant to 10 CFR 50.59 and approved administrative procedures. Items 9.9.2.A.2.c and d are not subject to the 10 CFR 50.59 review as they are governed by 10 CFR 50.54(p) and (q) respectively.
- 6. Temporarily approved changes to procedures of Section 9.9.2.A.2 shall be made in accordance with ANSI N18.7-1976/ANS 3.2, as modified in Appendix B of this Plan. Such changes shall be documented and reviewed and approved in accordance with Sections 9.9.2.A.3 and 9.9.2.A.4 within 14 days and in accordance with approved administrative procedures.

**B. Plant Operations Review Committee**

Each plant shall have a Plant Operations Review Committee (PORC) which shall function to advise the Plant Manager in matters related to nuclear safety. This advisory function shall be performed by the PORC acting in a formal meeting periodically and as situations demand. PORC shall be organized and shall conduct business as described below. The Chairman and members shall be appointed in writing by the Plant Manager.

**1. Composition**

The composition of PORC shall be as follows:

Chairman:        Operations Manager

Member: Operations representative(s)  
Member: Maintenance and Modifications representative(s)  
Member: Radiological and Chemistry Control  
(RADCHEM) representative(s)  
Member: Engineering representative(s)

2. Alternates

Alternate chairmen and members shall be appointed in writing by the Plant Manager.

3. Meeting Frequency

The PORC shall meet at least once per calendar month and as convened by the PORC Chairman or designated alternate.

4. Quorum

The PORC shall consist of the Chairman or designated alternate and three of the four functional area representatives.

5. Reporting

The PORC reports to the Plant Manager on its activities and findings. The meeting minutes shall serve as the official correspondence from PORC to the Plant Manager. PORC recommendations shall be recorded in the minutes and submitted to the Plant Manager.

6. Functions

- a. Advise the Plant Manager on matters related to nuclear safety;
- b. Recommend to the Plant Manager approval or disapproval of items considered under Section 9.9.2.B.7; and
- c. Provide written notification to the Site Vice President and the NSRB of safety significant disagreements between the PORC and the Plant Manager within 24 hours. The Plant Manager shall have responsibility for resolution of such disagreements.

## 7. Responsibilities

The PORC shall be used to conduct, as a minimum, reviews of the following. The PORC may delegate the performance of reviews, but shall maintain cognizance over and responsibility for them, e.g., subcommittees.

- a. The applicable administrative procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978
- b. The emergency operating procedures which implement NUREG-0737 and NUREG-0737, Supplement 1, as stated in Generic Letter 82-33
- c. Physical Security Plan
- d. Radiological Emergency Plan
- e. Quality Assurance Program for effluent and environmental monitoring, using the guidance contained in Regulatory Guide 4.15, December 1977, or Regulatory Guide 1.21, Revision 1, 1974 and Regulatory Guide 4.1, Revision 1, 1975
- f. Process Control Program (radwaste packaging and shipping)
- g. Additional PORC reviews specifically required by site-specific technical specifications or the plant's licensing basis
- h. Proposed changes to TS; Technical Requirements Manual; their bases; amendments to the Operating License; and
- i. Selected safety evaluations for (a) procedures and (b) changes to procedures, programs, equipment, systems, and facilities to verify that such actions did not constitute an unreviewed safety question.

### 9.9.3 Records

The PORC shall maintain written minutes of PORC meetings that, at a minimum, document the results of its activities. Copies shall be provided to the Site Vice President. At a minimum, the PORC minutes shall include results of the activities conducted under the provisions of Section 9.9.

**ENCLOSURE 2**

**Comparison of Standard Technical Specifications  
to Applicable Section of NQA Plan**



**TABLE 1 - Comparison With STS**

| STANDARD TECHNICAL SPECIFICATIONS<br>*  | TVA NQA PLAN PROPOSED REVISION  |
|---|---|
| <p>5.5 Reviews and Audits<br/>[Reviewer's Note: The licensee shall describe the method(s) established to conduct independent reviews and audits. The methods may take a range of forms acceptable to the NRC. These methods may include creating an organizational unit or a standing or ad hoc committee, or assigning individuals capable of conducting these reviews and audits. When an individual performs a review function, a cross disciplinary review determination is necessary. If deemed necessary, such reviews shall be performed by the review personnel of the appropriate discipline. Individual reviewers shall not review their own work. Regardless of the method used, the licensee shall specify the functions, organizational arrangement, responsibilities, appropriate ANSI/ANS 3.1-1981 qualifications, and reporting requirements of each functional element or unit that contributes to these processes.]</p> | <p>9.9 Plant reviews<br/>9.9.1 General<br/>The plant staff organization provides reviews of day-to-day activities to ensure they are conducted in a safe manner. Qualified Reviewers provide for reviews of procedures, procedure changes, and proposed changes to structures, systems, and components that affect nuclear safety in their area of expertise.<br/>The PORC is a multidisciplined committee responsible for providing an oversight review of documents required for the safe operation of the plant. PORC advises the Plant Manager on matters related to nuclear safety.</p>  |
| <p>5.5.1 <u>Plant Reviews</u><br/>[Reviewer's Note: The licensee shall describe provisions for plant reviews (organization, reporting, records) and the appropriate ANSI/ANS Standard for personnel qualification.]</p>   | <p>9.9.2 Plant Reviews<br/>A. Activities which affect nuclear safety shall be conducted as follows:<br/>1. Proposed changes or modifications to plant nuclear safety-related structures, systems, and components shall be reviewed in accordance with approved written procedures. Such modifications shall be reviewed by an individual/group other than the individual/group which designed the modification. Proposed modifications to plant nuclear safety-related structures, systems, and components shall be approved by the Plant Manager, or designee, prior to implementation.<br/>2. {pertains to types of procedures and not procedure reviews. Matrixed to STS specification 5.7.1.1.}<br/>3. Procedures or procedure changes shall be reviewed by a qualified individual knowledgeable in the subject matter other than the preparer. The reviewer may be from the same or different organization. Procedures not reviewed by PORC shall be approved by the responsible management in accordance with established program requirements. Procedures reviewed by PORC shall be approved by the Plant Manager, or designee.<br/>4. Qualified Reviewers responsible for reviews performed in accordance with Section 9.9.2.A.3 shall be designated and qualified. Qualifications of</p> |

qualified reviewers shall be as specified in written procedures. Such reviews shall include a determination of whether additional cross-disciplinary review is necessary. If deemed necessary, such review shall be performed by review personnel of the appropriate discipline.

5. Procedures and intent change to these procedures shall be reviewed to determine whether an unreviewed safety question is involved pursuant to 10 CFR 50.59 and approved administrative procedures. Items 9.9.2.A.2.c and .d are not subject to the 10 CFR 50.59 review as they are governed by 10 CFR 50.54(q) and (p) respectively.

**9.9.2.B Plant Operations Review Committee**  
Each plant shall have a Plant Operations Review Committee (PORC) which shall function to advise the Plant Manager in matters related to nuclear safety. This advisory function shall be performed by the PORC acting in a formal meeting periodically and as situations demand. PORC shall be organized and shall conduct business as described below. The Chairman and members shall be appointed in writing by the Plant Manager.

**1. Composition**

The composition of PORC shall be as follows:

Chairman: Operations Manager

Member: Operations representative(s)

Member: Maintenance and Modifications representative(s)

Member: Radiological and Chemistry Control (RADCHEM) representative(s)

Member: Engineering representative(s)

**2. Alternates**

Alternate Chairman and members shall be appointed in writing by the Plant Manager.

**3. Meeting Frequency**

The PORC shall meet at least once per calendar month and as convened by the PORC Chairman or designated alternate.

**4. Quorum**

The PORC shall consist of the Chairman or designated alternate and three of the four functional area representatives.

**5. Reporting**

The PORC reports to the Plant Manager on its activities and findings. The meeting minutes shall serve as the official correspondence from PORC to the Plant Manager. PORC recommendations shall be recorded in the minutes and submitted to the Plant Manager.

|  |  |
|--|--|
| <p>5.5.1.1 Functions<br/>The [plant review method specified in Specification 5.5.1] shall, as a minimum, incorporate functions that:</p>   | <p>9.9.2.B.6 Function</p>  |
| <p>a. Advise the [Plant Superintendent] on all matters related to nuclear safety;</p>  | <p>a. Advise the Plant Manager on matters related to nuclear safety;</p>   |
| <p>b. Recommend to the [Plant Superintendent] approval or disapproval of items considered under Specifications 5.5.1.2.a through 5.5.1.2.e prior to their implementation, except as provided in Specification 5.7.1.3;</p>   | <p>b. Recommend to the Plant Manager approval or disapproval of items considered under Section 9.9.2.B.7; and</p>  |
| <p>c. Determine whether each item considered under Specifications 5.5.1.2.a through 5.5.1.2.d constitutes an unreviewed safety question as defined in 10 CFR 50.59; and</p>  | <p>9.9.2.B.7.i PORC shall review selected safety evaluations for (a) procedures and (b) changes to procedures, programs, equipment, systems, and facilities to verify that such actions did not constitute an unreviewed safety question;</p> <p>{Note: Safety evaluations are selected for review based on the safety significance of the change. The methodology for selection is described in implementing procedures.}</p>   |
| <p>d. Notify the [Vice President-Nuclear Operations] of any safety significant disagreement between the [review organization or individual specified in Specification 5.5.1] and the [Plant Superintendent] within 24 hours. However, the [Plant Superintendent] shall have responsibility for resolution of such disagreements pursuant to Specification 5.1.1.</p> | <p>9.9.2.B.6.c. Provide written notification to the Site Vice President and the NSRB of safety significant disagreement between the PORC and the Plant Manager within 24 hours. The Plant Manager shall have responsibility for resolution of such disagreements.</p>  |
| <p>5.5.1.2 Responsibilities<br/>The [plant review method specified in Specification 5.5.1] shall be used to conduct, as a minimum, reviews of the following:</p>   | <p>9.9.2.B.7 Responsibilities<br/>The PORC shall be used to conduct, as a minimum, reviews of the following. The PORC may delegate the performance of reviews, but shall maintain cognizance over and responsibility for them, e. g., subcommittees.</p>   |
| <p>a. All proposed procedures required by Specification 5.7.1.1 and changes thereto;</p>   | <p>9.9.2.B.7<br/>a. The applicable administrative procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978<br/>b. The emergency operating procedures which implement NUREG-0737 and NUREG-0737, Supplement 1, as stated in Generic Letter 82-33<br/>c. Physical Security Plan<br/>d. Radiological Emergency Plan<br/>e. Offsite Dose Calculation Manual (ODCM)<br/>f. Process Control Program (radwaste packaging and shipping)<br/>g. Additional PORC reviews specifically required</p> |

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|   | <p>by site-specific technical specifications</p> <p>h. Proposed changes to TS; Technical Requirements Manual; their bases; amendments to the Operating License; and</p> <p>i. Selected safety evaluations for (a) procedures and (b) changes to procedures, programs, equipment, systems, and facilities to verify that such actions did not constitute an unreviewed safety question.</p> <p>{Note: The Fire Protection Program (STS specification 5.7.1.1.f) is removed from PORC review based on NRC approval of similar change at another utility. This is consistent with NRC Regulatory Issue Summary 99-02, Relaxation of Technical Specification Requirements for PORC Review of Fire Protection Program Changes. }</p>  |
| b. All proposed programs required by Specification 5.7.2 and changes thereto;   | {9.9.2.B.7 specifically requires PORC review of programs required by STS specifications 5.7.2.2 and 5.7.2.3. Programs not specifically requiring PORC review are subject to review by qualified reviewers. }   |
| c. All proposed changes and modifications to unit systems or equipment that affect nuclear safety;<br>d. All proposed tests and experiments that affect nuclear safety; and   | <p>9.9.2.A.1 Proposed changes or modifications to plant nuclear safety-related structures, systems, and components shall be reviewed in accordance with approved written procedures. Such modifications shall be reviewed by an individual/group other than the individual/group which designed the modification. Proposed modifications to plant nuclear safety-related structures, systems, and components shall be approved by the Plant Manager, or designee, prior to implementation.</p> <p>9.9.2.B.7.i PORC shall review selected safety evaluations for (a) procedures and (b) changes to procedures, programs, equipment, systems, and facilities to verify that such actions did not constitute an unreviewed safety question;</p> <p>{Note: Safety evaluations are selected for review based on the safety significance of the change. The methodology for selection is described in implementing procedures. }</p> |
| e. All proposed changes to these Technical Specifications (TS), their Bases, and the Operating License.   | 9.9.2.B.7.h Proposed changes to TSs; Technical Requirements Manual; their bases; amendments to the Operating License;  |
| <p><b>5.5.3 Records</b></p> <p>Written records of reviews and audits shall be maintained. As a minimum these records shall include:</p> <p>a. Results of the activities conducted under the provisions of Section 5.5</p> | <p>9.9.3 Records</p> <p>The PORC shall maintain written minutes of PORC meetings that, at a minimum, document the results of its activities. Copies shall be provided to the Site Vice President. At a minimum, the PORC minutes shall include results of the activities conducted</p>   |

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| <p>b. {pertains to audits}<br/> c. {pertains to audits}<br/> d. Recommended approval or disapproval of items considered under Specifications 5.5.1.2.a through 5.5.1.2.e; and<br/> e. Determination whether each item considered under Specifications 5.5.1.2.a through 5.5.1.2.d constitutes an unreviewed safety question as defined in 10 CFR 50.59.</p>  | <p>under the provisions of Section 9.9.</p>  |
| <p><b>5.7.1 Procedures</b><br/> <b>5.7.1.1 Scope</b><br/> Written procedures shall be established, implemented, and maintained covering the following activities:</p>  | <p><b>9.9.2 Plant Reviews</b><br/> <b>9.9.2.A.2</b><br/> Written procedures shall be established, implemented, and maintained covering the following activities:</p>   |
| <p>a. The applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978;</p>   | <p>a. The applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978 and in accordance with Appendix B of this Plan;</p>  |
| <p>b. The emergency operating procedures required to implement the requirements of NUREG-0737, Supplement 1, as stated in [Generic Letter 82-33];</p>  | <p>b. The emergency operating procedures which implement NUREG-0737 and NUREG-0737, Supplement 1, as stated in Generic Letter 82-33;</p>   |
| <p>c. Security plan implementation;</p>  | <p>c. Security Plan implementation;</p>  |
| <p>d. Emergency plan implementation;</p>   | <p>d. Radiological Emergency Plan implementation;</p>  |
| <p>e. Quality assurance for effluent and environmental monitoring;</p>   | <p>e. Offsite Dose Calculation Manual;</p>   |
| <p>f. Fire Protection Program implementation; and</p>  | <p>f. Fire Protection Program implementation;</p>  |
| <p>g. All programs specified in Specification 5.7.2<br/> {The listing is as follows }<br/><br/> <u>Programs and Manuals.</u><br/> 5.7.2.1 Radiation Protection Program<br/> 5.7.2.2 Process Control Program (PCP)<br/><br/> 5.7.2.3 Offsite Dose Calculation Manual (ODCM)<br/> 5.7.2.4 Primary Coolant Sources Outside Containment<br/> 5.7.2.5 In Plant Radiation Monitoring<br/> 5.7.2.6 Post Accident Sampling<br/> 5.7.2.7 Radioactive Effluent Controls Program<br/> 5.7.2.8 Radiological Environmental Monitoring Program<br/> 5.7.2.9 Component Cyclic or Transient Limit<br/> 5.7.2.10 Pre-Stressed Concrete Containment Tendon Surveillance Program<br/> 5.7.2.11 Inservice Inspection Program<br/> 5.7.2.12 Inservice Testing Program</p> | <p>{9.9.2.A.2 lists the below three specific programs. 9.9.2.A.3 refers to procedures and programs required by site-specific technical specifications which, in turn, list programs and manuals corresponding to STS Specification 5.7.2.}<br/> g. Radiation Protection Program;<br/> h. Process Control Program implementation (radwaste packaging and shipping);<br/><br/> i. In-Plant Radiation Monitoring.</p> |

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| <p>5.7.2.10 Pre-Stressed Concrete Containment Tendon Surveillance Program<br/> 5.7.2.11 Inservice Inspection Program<br/> 5.7.2.12 Inservice Testing Program<br/> 5.7.2.13 Steam Generator (SG) Tube Surveillance Program<br/> 5.7.2.14 Secondary Water Chemistry<br/> 5.7.2.15 Ventilation Filter Testing Program (VFTP)<br/> 5.7.2.16 Explosive Gas and Storage Tank Radioactivity Monitoring Program<br/> 5.7.2.17 Diesel Fuel Oil Testing Program<br/> 5.7.2.18 Fire Protection Program</p> |   |
| <p>5.7.1.2 Review and Approval<br/> Each procedure of Specification 5.7.1.1, and changes thereto, shall be reviewed in accordance with Specification 5.5.1, approved by the [Plant Superintendent] or his designee in accordance with approved administrative procedures prior to implementation and reviewed periodically as set forth in administrative procedures.</p>   | <p>9.9.2.A.3<br/> Procedures required by Section 9.9.2.A.2, procedures and programs required by site-specific technical specifications, and other procedures which affect plant nuclear safety, and changes (other than editorial or typographical changes) thereto, shall be prepared and reviewed in accordance with approved administrative procedures prior to implementation except as specified in Section 9.9.2.A.6. Procedures or procedure changes shall be reviewed by a qualified individual knowledgeable in the subject matter other than the preparer. The reviewer may be from the same or different organization. Procedures not reviewed by PORC shall be approved by the responsible management in accordance with established program requirements. Procedures reviewed by PORC shall be approved by the Plant Manager, or designee.</p> |
| <p>5.7.1.3 Temporary Changes<br/> Temporary changes to procedures of Specification 5.7.1 may be made provided:</p>  | <p>9.9.2.A.6<br/> Temporarily approved changes to procedures of Section 9.9.2.A.2 shall be made in accordance with ANSI N18.7-1976/ANS 3.2, as modified in Appendix B of this Plan.</p>   |
| <p>a. The intent of the existing procedure is not altered;<br/> b. The change is approved by two members of the plant management staff, at least one of whom holds a Senior Reactor Operator license on the unit affected; and</p>  | <p>{The existing NQA Plan, Revision 9 states the following under Appendix B, RG 1.33.}<br/> The guidelines of Section 5.2.2 of ANSI N18.7-1976 are accepted with the following interpretations:<br/> Temporary changes which clearly do not change the intent of the approved procedure shall as a minimum be approved by two members of the plant management staff, at least one of whom holds a Senior Reactor Operator License on the unit affected or as defined in Section 9.9 of this Plan, the FSAR, or appropriate plant procedures.</p>  |
| <p>c. The change is documented and reviewed in accordance with Specification 5.5.1 and approved by the [Plant Superintendent] or his designee in accordance with administrative procedures within</p>   | <p>Such changes shall be documented and reviewed and approved in accordance with Sections 9.9.2.A.3 and 9.9.2.A.4 within 14 days and in accordance with approved administrative procedures.</p>   |

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| 14 days of implementation. |  |
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\* **Standard Technical Specifications (STS) General Electric Plants, BWR/4, Revision 0, 09/28/92 (NUREG-1433) and Standard Technical Specifications Westinghouse Plants, Revision 0 (last time TSs discussed PORC), 09/28/92 (NUREG-1431).**

**TABLE 2 - Comparison with Standard Review Plan**

| NUREG 0800, STANDARD REVIEW PLAN, REVISION 2 and ANSI N18.7-1976  | TVA NQA PLAN PROPOSED REVISION  |
|---|---|
| <p>NUREG 0800, Section 13.4, Operational Review Acceptance Criteria for Plant Staff Review</p> <p>(a) Scope of this review should include that of Section 4.4 of ANSI N18.7 (ANS 3.2), as endorsed by Regulatory Guide 1.33.</p> <p>(b) Organizational arrangements should provide for interdisciplinary reviews of subject matter.</p> | <p>{See comparison to ANSI N18.7 below}</p> <p>9.9.2 Plant Reviews</p> <p>A. Activities which affect nuclear safety shall be conducted as follows:</p> <p>3. Procedures or procedure changes shall be reviewed by a qualified individual knowledgeable in the subject matter other than the preparer. The reviewer may be from the same or different organization. Procedures not reviewed by PORC shall be approved by the responsible management in accordance with established program requirements. Procedures reviewed by PORC shall be approved by the Plant Manager, or designee.</p> <p>4. Qualified Reviewers responsible for reviews performed in accordance with Section 9.9.2.A.3 shall be designated and qualified. Qualifications of qualified reviewers shall be as specified in written procedures. Such reviews shall include a determination of whether additional cross-disciplinary review is necessary. If deemed necessary, such review shall be performed by review personnel of the appropriate discipline.</p> |
| <p>(c) Qualification levels for plant staff personnel performing review should be at least equivalent to those described in Section 4.4 of ANSI N18.1 as endorsed by Regulatory Guide 1.8.</p>  | <p>{This criterion continues to be met through TVA's commitment to Regulatory Guide 1.8, Revision 2, April 1987 which endorses ANSI N18.1-1971 and ANSI/ANS 3.1-1981. Specifics of this commitment are provided on page 9 of 23 of Appendix B of the NQA Plan for the training and qualification of individuals in the professional/technical groups at the sites, and through Section 9.9.2.A.4 of the proposed NQA Plan change}</p> <p>9.9.2.A.4 Qualified Reviewers responsible for reviews performed in accordance with Section 9.9.2.A.3 shall be designated and qualified. Qualifications of qualified reviewers shall be as specified in written procedures. Such reviews shall include a determination of whether additional cross-disciplinary review is necessary. If deemed necessary, such review shall be performed by review personnel of the appropriate discipline.</p>   |



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| <p>(d) Review activities should be documented and results forwarded to appropriate members of management.</p>  | <p>9.9.2.A.3 Procedures or procedure changes shall be reviewed by a qualified individual knowledgeable in the subject matter other than the preparer. The reviewer may be from the same or different organization. Procedures not reviewed by PORC shall be approved by the responsible management in accordance with established program requirements. Procedures reviewed by PORC shall be approved by the Plant Manager or designee.</p> <p>9.9.2.A.6 Temporarily approved changes to procedures of Section 9.9.2.A.2 shall be made in accordance with ANSI N18.7-1976/ANS 3.2, as modified in Appendix B of this Plan. Such changes shall be documented and reviewed and approved in accordance with Sections 9.9.2.A.3 and 9.9.2.A.4 within 14 days and in accordance with approved administrative procedures.</p> <p>9.9.2.B.5 Reporting<br/>The PORC reports to the Plant Manager on its activities and findings. The meeting minutes shall serve as the official correspondence from PORC to the Plant Manager. PORC recommendations shall be recorded in the minutes and submitted to the Plant Manager.</p> <p>9.9.3 Records<br/>The PORC shall maintain written minutes of PORC meetings that, at a minimum, document the results of its activities. Copies shall be provided to the Site Vice President. At a minimum, the PORC minutes shall include results of the activities conducted under the provisions of Section 9.9.</p> |
| <p>NUREG 0800, Section 17.2, Quality Assurance During the Operations Phase<br/>{There are no specific acceptance criteria. Plant review/PORC functions are addressed through reference to Regulatory Guide 1.33 and the endorsed ANSI N18.7-1976.}</p> |  |
| <p>ANSI N18.7-1976<br/>Section 4.4, Review Activities of the Onsite Operating Organization</p>   |  |

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| <p>The onsite operating organization shall provide, as part of the normal duties of plant supervisory personnel, timely and continuing monitoring of operating activities to assist the Plant Manager in keeping abreast of general plant conditions and to verify that the day-to-day operating activities are conducted safely and in accordance with applicable administrative controls. These continuing monitoring activities are considered to be an integral part of the routine supervisory function and are important to the safety of plant operation.</p> | <p>9.9 Plant reviews<br/> 9.9.1 General<br/> The plant staff organization provides reviews of day-to-day activities to ensure they are conducted in a safe manner. Qualified Reviewers provide for reviews of procedures, procedure changes, and proposed changes to structures, systems, and components that affect nuclear safety in their area of expertise.</p> <p>The PORC is a multidisciplined committee responsible for providing an oversight review of documents required for the safe operation of the plant. PORC advises the Plant Manager on matters related to nuclear safety.</p>   |
| <p>The onsite operating organization should perform reviews periodically and as situations demand, to evaluate plant operations and to plan future activities.</p> <p>The important elements of the reviews should be documented. Such reviews serve a useful purpose but shall not take the place of the reviews and audits described in Sections 4.3 and 4.5, respectively.</p> <p>The onsite operating organization should screen subjects of potential concern to independent reviewers and perform preliminary investigations (see 4.3.4).</p>                  | <p>9.9.2.B Plant Operations Review Committee<br/> Each plant shall have a Plant Operations Review Committee (PORC) which shall function to advise the Plant Manager in matters related to nuclear safety. This advisory function shall be performed by the PORC acting in a formal meeting periodically and as situations demand. PORC shall be organized and shall conduct business as described below. The Chairman and members shall be appointed in writing by the Plant Manager.</p> <p>9.9.2.B.5 Reporting<br/> The PORC reports to the Plant Manager on its activities and findings. The meeting minutes shall serve as the official correspondence from PORC to the Plant Manager. PORC recommendations shall be recorded in the minutes and submitted to the Plant Manager.</p> <p>9.9.3 Records<br/> The PORC shall maintain written minutes of PORC meetings that, at a minimum, document the results of its activities. Copies shall be provided to the Site Vice President. At a minimum, the PORC minutes shall include results of the activities conducted under the provisions of Section 9.9.</p> <p>9.9.2.B.7 Responsibilities<br/> The PORC shall be used to conduct, as a minimum, reviews of the following. The PORC may delegate the performance of reviews, but shall maintain cognizance over and responsibility for them, e. g., subcommittees.</p> <p>9.9.2.B.7<br/> a. The applicable administrative procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978<br/> b. The emergency operating procedures which</p> |

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| <p>The Plant Manager, in carrying out his responsibility for overall safety of plant operations, shall be responsible for timely referral of appropriate matters to management and independent reviewers.</p> | <p>implement NUREG-0737 and NUREG-0737, Supplement 1, as stated in Generic Letter 82-33</p> <ul style="list-style-type: none"> <li>c. Physical Security Plan</li> <li>d. Radiological Emergency Plan</li> <li>e. Offsite Dose Calculation Manual (ODCM)</li> <li>f. Process Control Program (radioactive waste packaging and shipping)</li> <li>g. Additional PORC reviews specifically required by site-specific technical specifications</li> <li>h. Proposed changes to TS; Technical Requirements Manual; their bases; amendments to the Operating License; and</li> <li>i. Selected safety evaluations for (a) procedures and (b) changes to procedures, programs, equipment, systems, and facilities to verify that such actions did not constitute an unreviewed safety question.</li> </ul> <p>9.9.2.B.6.c PORC shall provide written notification to the Site Vice President and the NSRB of safety significant disagreement between the PORC and the Plant Manager within 24 hours. The Plant Manager shall have responsibility for resolution of such disagreements.</p> |
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