



Tennessee Valley Authority, Post Office Box 2000, Decatur, Alabama 35609-2000

July 8, 2004

TVA-BFN-TS-422

10 CFR 50.90

U.S. Nuclear Regulatory Commission
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Washington, D.C. 20555-0001

Gentlemen:

In the Matter of)	Docket Nos. 50-259
Tennessee Valley Authority)	50-260
		50-296

BROWNS FERRY NUCLEAR PLANT (BFN) - UNITS 1, 2, AND 3 - TECHNICAL SPECIFICATIONS (TS) CHANGE 422 - APPLICATION FOR TS IMPROVEMENT TO ELIMINATE REQUIREMENTS FOR HYDROGEN MONITORS USING THE CONSOLIDATED LINE ITEM IMPROVEMENT PROCESS

Pursuant to 10 CFR 50.90, the Tennessee Valley Authority (TVA) is submitting a request for a TS change (TS-422) to licenses DPR-33, DPR-52, and DPR-68 for BFN Units 1, 2, and 3, respectively.

The proposed amendment will delete the TS requirements related to hydrogen monitors. The proposed TS changes support implementation of the revisions to 10 CFR 50.44, "Standards for Combustible Gas Control System in Light-Water-Cooled Power Reactors," that became effective on October 16, 2003. The changes are consistent with Revision 1 of NRC-approved Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-447, "Elimination of Hydrogen Recombiners and Change to Hydrogen and Oxygen Monitors." The availability of this TS improvement was announced in the Federal Register on September 25, 2003, as part of the Consolidated Line Item Improvement Process.

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Enclosure 1 provides a description of the proposed change, the requested confirmation of applicability, and plant-specific verifications and commitments. Enclosure 2 provides the existing Unit 2 TS pages marked-up to show the proposed changes. Identical changes are being requested for BFN Units 1 and 3 TS. Implementation of TSTF-447 also involves various changes to the TS Bases. The TS Bases changes will be submitted with a future update in accordance with TS 5.5.10, "Technical Specifications (TS) Bases Control Program."

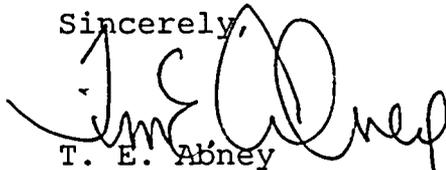
TVA is asking that this TS change be approved by October 1, 2004, and that the implementation of the revised TS be made within 60 days of NRC approval.

TVA has determined that there are no significant hazards considerations associated with the proposed change and that the TS change qualifies for a categorical exclusion from environmental review pursuant to the provisions of 10 CFR 51.22(c)(9). Additionally, in accordance with 10 CFR 50.91(b)(1), TVA is sending a copy of this letter and Enclosures to the Alabama State Department of Public Health.

There are regulatory commitments contained in Section 6.1 of Enclosure 1. If you have any questions about this TS change, please contact me at (256)729-2636.

I declare under penalty of perjury that the foregoing is true and correct. Executed on July 6, 2004.

Sincerely,



T. E. Abney
Manager of Licensing
and Industry Affairs

Enclosures:

1. Description and Assessment
2. Proposed Technical Specifications Changes (mark-up)

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Enclosures

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Enclosure 1

Browns Ferry Nuclear Plant (BFN) Units 1, 2, and 3

Technical Specifications (TS) Change 422

Eliminate Requirements for Hydrogen Monitors Using the Consolidated Line Item Improvement Process

Description and Assessment

1.0 DESCRIPTION

The proposed license amendment deletes TS references to the hydrogen monitors in TS 3.3.3.1, "Post Accident Monitoring (PAM) Instrumentation." The proposed TS changes support implementation of the revisions to 10 CFR 50.44, "Standards for Combustible Gas Control System in Light-Water-Cooled Power Reactors," that became effective on October 16, 2003.

2.0 DESCRIPTION OF PROPOSED AMENDMENT

Consistent with the NRC-approved Revision 1 of TSTF-447, the proposed TS changes include:

- TS 3.3.3.1, Condition C - The Note referencing hydrogen monitors is deleted
- TS 3.3.3.1, Condition D, Inoperable Hydrogen Monitors, is deleted
- TS 3.3.3.1, Condition E, Reference to deleted Condition D is removed
- Table 3.3.3.1-1 Item 7, Drywell and Torus H₂ Analyzer is deleted

Existing BFN TS vary from Standard TS (STS) in that a different Channel Calibration Surveillance Requirement (SR) frequency is prescribed for the hydrogen monitors than that specified in STS as differentiated in BFN SRs 3.3.3.1.2 and 3.3.3.1.4. The deletion of the hydrogen monitors from TS likewise requires these two SRs be modified as shown in the attached TS mark-ups to remove the references to the

hydrogen monitors. These additional changes are administrative and are consistent with TSTF-447.

To avoid renumbering and formatting changes that result from the deletion of the above requirements related to hydrogen monitors, the term "deleted" will be inserted as shown in the TS mark-ups. BFN does not have hydrogen recombiners, so no changes to TS are necessary in this regard. Also, requirements for the Drywell and Torus oxygen monitors have been previously removed from BFN TS and are located in the Technical Requirements Manual (TRM). Therefore, no additional TS changes are needed for the relocation of oxygen monitors. As described in NRC-approved Revision 1 of TSTF-447, the changes to TS requirements result in changes to various TS Bases sections. The TS Bases changes will be submitted with a future update in accordance with TS 5.5.10, "Technical Specifications (TS) Bases Control Program."

3.0 BACKGROUND

The background for this application is adequately addressed by the NRC Notice of Availability published on September 25, 2003 (68 FR 55416) (Reference 1), TSTF-447, the documentation associated with the 10 CFR 50.44 rulemaking, and other related documents.

4.0 REGULATORY REQUIREMENTS AND GUIDANCE

The applicable regulatory requirements and guidance associated with this application are adequately addressed by the NRC Notice of Availability published on September 25, 2003 (68 FR 55416), TSTF-447 (Reference 1), the documentation associated with the 10 CFR 50.44 rulemaking, and other related documents.

5.0 TECHNICAL ANALYSIS

As noted in Section 2.0, BFN does not utilize hydrogen recombiners, and the Drywell and Torus oxygen monitors have been previously removed from TS (Reference 2). In addition, NRC has approved the designation of the oxygen monitors as Regulatory Guide 1.97 Category 3 instruments (Reference 3) for BFN. In the revision to 10 CFR 50.44, "Standards for Combustible Gas Control System in Light-Water-Cooled Power Reactors," that became effective on October 16, 2003, NRC indicated that existing oxygen monitoring commitments for currently licensed plants were sufficient to meet the revised rule.

TVA has reviewed the safety evaluation (SE) published on September 25, 2003 (68 FR 55416) as part of the CLIIP Notice of Availability. This verification included a review of the NRC staff's SE, as well as the supporting information provided to support TSTF-447. TVA has concluded that the justifications presented in the TSTF proposal and the SE prepared by the NRC staff are applicable to BFN and justify this amendment for the incorporation of the changes to the BFN 1, 2, and 3 TS.

6.0 REGULATORY ANALYSIS

A description of this proposed change and its relationship to applicable regulatory requirements and guidance was provided in the NRC Notice of Availability published on September 25, 2003 (68 FR 55416) (Reference 1), TSTF-447, Rev. 1, the documentation associated with the 10 CFR 50.44 rulemaking, and other related documents.

6.1 Verification and Commitments

As discussed in the model SE published in the *Federal Register* on September 25, 2003 (68 FR 55416) for this TS improvement, TVA is making the following verifications and regulatory commitments. BFN Unit 1 is currently in a prolonged outage and the hydrogen/oxygen monitors are not in service. Therefore, the below commitments reflect the current operating status of the three BFN units.

1. TVA has verified that a hydrogen monitoring system capable of diagnosing beyond design-basis accidents is installed at BFN Units 2 and 3, and will be installed on Unit 1 prior to restart. TVA is making a regulatory commitment to maintain that capability to the level of Regulatory Guide 1.97, Category 3. The hydrogen monitors will be included in the TRM. This regulatory commitment will be implemented at the same time as TS-447 is implemented at BFN.
2. TVA has verified that an oxygen monitoring system capable of verifying the status of the inerted containment is installed at BFN Units 2 and 3, and will be installed on Unit 1 prior to restart. TVA is making a regulatory commitment to maintain that capability to the level of Regulatory Guide 1.97, Category 3. The oxygen monitors are currently included in the BFN Unit 1, 2, and 3 TRMs.

7.0 NO SIGNIFICANT HAZARDS CONSIDERATION

TVA has reviewed the proposed no significant hazards consideration determination published on September 25, 2003 (68 FR 55416) (Reference 1) as part of the CLIIP. TVA has concluded that the proposed determination presented in the notice is applicable to BFN Units 1, 2, and 3, and the determination is hereby incorporated by reference to satisfy the requirements of 10 CFR 50.91 (a).

8.0 ENVIRONMENTAL EVALUATION

TVA has reviewed the environmental evaluation included in the model SE published on September 25, 2003 (68 FR 55416) (Reference 1) as part of the CLIIP. TVA has concluded that the staff's findings presented in that evaluation are applicable to BFN Units 1, 2, and 3, and the evaluation is hereby incorporated by reference for this application.

9.0 PRECEDENT

This application is being made in accordance with the CLIIP. TVA is not proposing variations or deviations from the TS changes described in TSTF-447 or the NRC staff's model SE published on September 25, 2003 (68 FR 55416) (Reference 1).

10.0 REFERENCES

1. Federal Register Notice: Notice of Availability of Model Application Concerning Technical Specification Improvement To Eliminate Hydrogen Recombiner Requirement, and Relax the Hydrogen and Oxygen Monitor Requirements for Light Water Reactors Using the Consolidated Line Item Improvement Process, published September 25, 2003 (68 FR 55416).
2. June 22, 1978, Letter from NRC to TVA, Safety Evaluation Report Approving TS Change 108 (Removal of Oxygen Monitors from TS).
3. February 8, 1990, Letter from NRC to TVA, Emergency Response Capability - Conformance to Regulatory Guide 1.97, Revision 3 (TAC Nos. 51073, 51074, 51075).

Enclosure 2

Browns Ferry Nuclear Plant (BFN)
Units 1, 2, and 3

Technical Specifications (TS) Change 422

Eliminate Requirements for Hydrogen Monitors Using
the Consolidated Line Item Improvement Process

Proposed Technical Specifications Changes (mark-up)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>C. NOTE Not applicable to hydrogen monitor channels.</p> <p>One or more Functions with two required channels inoperable.</p>	<p>C.1 Restore one required channel to OPERABLE status.</p>	<p>7 days</p>
<p>D. Two required hydrogen monitor channels inoperable.</p>	<p>D.1 Restore one required hydrogen monitor channel to OPERABLE status.</p>	<p>72 hours</p>
<p>E. Required Action and associated Completion Time of Condition C D not met.</p>	<p>E.1 Enter the Condition referenced in Table 3.3.3.1-1 for the channel.</p>	<p>Immediately</p>
<p>F. As required by Required Action E.1 and referenced in Table 3.3.3.1-1.</p>	<p>F.1 Be in MODE 3.</p>	<p>12 hours</p>
<p>G. As required by Required Action E.1 and referenced in Table 3.3.3.1-1.</p>	<p>G.1 Initiate action in accordance with Specification 5.6.6.</p>	<p>Immediately</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.3.3.1.1	Perform CHANNEL CHECK for each required PAM instrumentation channel.	31 days
SR 3.3.3.1.2	Perform CHANNEL CALIBRATION of the Drywell and Torus H₂ analyzer Functions.	92 days
SR 3.3.3.1.3	Perform CHANNEL CALIBRATION of the Reactor Pressure Functions.	184 days
SR 3.3.3.1.4	Perform CHANNEL CALIBRATION for each required PAM instrumentation channel except for the Reactor Pressure, and the Drywell and Torus H₂ analyzer Functions.	24 months

Deleted

Table 3.3.3.1-1 (page 1 of 1)

Post Accident Monitoring Instrumentation

FUNCTION	REQUIRED CHANNELS	CONDITIONS REFERENCED FROM REQUIRED ACTION E.1
1. Reactor Pressure	2	F
2. Reactor Vessel Water Level		
a. Emergency Systems Range	2	F
b. Post-Accident Flood Range	2	F
3. Suppression Pool Water Level	2	F
4. Drywell Pressure		
a. Normal Range	2	F
b. Wide Range	2	F
5. Primary Containment Area Radiation	2	G
6. PCIV Position	2 per penetration flow path ^{(a)(b)}	F
7. Drywell and Tjords H₂ Analyzer	2	F
8. Suppression Pool Water Temperature	2	F
9. Drywell Atmosphere Temperature	2	F

DELETED

- (a) Not required for isolation valves whose associated penetration flow path is isolated by at least one closed and deactivated automatic valve, closed manual valve, blind flange, or check valve with flow through the valve secured.
- (b) Only one position indication channel is required for penetration flow paths with only one installed control room PAM category 1 indication channel.