

October 26, 2006

TVA-BFN-TS-457

10 CFR 50.90

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
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Washington, D.C. 20555-0001

Gentlemen:

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

**BROWNS FERRY NUCLEAR PLANT (BFN) - UNITS 2 and 3 - TECHNICAL SPECIFICATIONS (TS) CHANGE TS-457 - CHANGE OF EMERGENCY DIESEL GENERATOR (EDG) REQUIRED ACTION 3.8.1.B.4 COMPLETION TIME (CT) FROM 14 DAYS TO 7 DAYS**

Pursuant to 10 CFR 50.90, the Tennessee Valley Authority (TVA) is submitting a request for a TS change (TS-457) to licenses DPR-52 and DPR-68 for BFN Units 2 and 3, respectively. The proposed change revises the CT for TS Required Action 3.8.1.B.4 from 14 days to 7 days for restoration of an inoperable EDG. The current 14-day CT was established via a license amendment requested by TVA in March 1997 and approved by NRC in August 1999. Part of the formal basis for that amendment as requested and approved was the assumption that BFN Unit 1 was shutdown. The near-term restart of Unit 1 will invalidate this assumption, therefore, the affected CTs are being returned to their original duration of 7 days. Enclosure 1 to this letter provides the justification for this request. Enclosure 2 provides mark-ups of the affected TS pages.

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

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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.

Approval of TS-457 is requested prior to BFN Unit 1 Cycle 7 operation, which is scheduled to begin in Spring 2007. Therefore, TVA is asking that this TS change be approved by January 17, 2007, and that the implementation of the revised TS be made within 60 days of NRC approval or prior to changing the Unit 1 reactor mode to startup, whichever is earlier.

It is TVA's position that the suitability of a 14-day EDG CT for all three BFN units can be demonstrated, and the subject request to return the Unit 2 and Unit 3 TS CT to a 7-day duration is being made only to address the interval until such time this position is adequately presented to NRC. It is TVA's intention to resubmit a TS change request to extend the TS Required Action 3.8.1.B.4 CT to 14 days for all three BFN units prior to the end of calendar year 2007.

There are no regulatory commitments associated with this submittal. If you have any questions about this matter, please contact me at (256) 729-2636.

I declare under penalty of perjury that the foregoing is true and correct. Executed on October 26, 2006.

Sincerely,

Original signed by:

William D. Crouch  
Manager of Licensing  
and Industry Affairs

Enclosures:

1. TVA Evaluation of the Proposed Change
2. Proposed Technical Specifications Changes (mark-up)

cc: See page 3

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Enclosures

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## **Enclosure 1**

### **Browns Ferry Nuclear Plant (BFN) Units 2 and 3**

#### **Technical Specifications (TS) Change TS-457 Change Of Emergency Diesel Generator (EDG) Completion Time (CT) From 14 Days To 7 Days**

#### **TVA Evaluation of the Proposed Change**

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### **1.0 DESCRIPTION**

Pursuant to 10 CFR 50.90, the Tennessee Valley Authority (TVA) is submitting this request for a TS change to licenses DPR-52 and DPR-68 for BFN Units 2 and 3, respectively. The proposed change revises the CT for Required Action 3.8.1.B.4 from 14 days to 7 days for restoration of an inoperable EDG. The current 14-day CT was established via a license amendment requested by TVA in March 1997 (Reference 1) and approved by NRC in August 1999 (Reference 2). Part of the formal basis for that amendment as requested and approved was the assumption that BFN Unit 1 is shutdown. The near-term restart of Unit 1 will invalidate this assumption, therefore, the affected CT's are being returned to the original duration of 7 days.

### **2.0 PROPOSED CHANGE**

The proposed TS change revises the Required Action 3.8.1.B.4 14-day CT currently in the Unit 2 and Unit 3 TS back to the 7-day duration which was part of the original TS. Marked-up TS pages showing the proposed revision are provided in Enclosure 2.

### **3.0 BACKGROUND**

By Reference 1, TVA requested the extension of the CT for Required Action 3.8.1.B.4 from the original duration of 7 days to a new duration of 14 days for Units 2 and 3. NRC approved this request in Reference 2. At the time, the eventual TVA decision to return Unit 1 to operation was still years in the future, so no change was requested for the Unit 1 TS. Additionally, since at that time no Unit 1 operation was possible for the foreseeable future, the formal justification for the changes to the Unit 2 and Unit 3 TS was made assuming Unit 1 remained in a shutdown condition. It was understood by both TVA and NRC that the 14-day CT in the Unit 2 and Unit 3 TS would require reevaluation and a Unit 1 TS change for a 14-day CT would be required should Unit 1 ever return to power operations.

Enclosure 1  
BFN Units 2 and 3 - TS 457  
TVA Evaluation of the Proposed Change

References 3 through 7 detail communications between TVA and NRC on the subject of EDG CT duration subsequent to TVA's decision to return Unit 1 to operation. No agreement was reached between TVA and NRC in this extensive dialogue, and at this juncture, adequate time no longer exists to reach agreement prior to the scheduled restart of Unit 1. To support the Unit 1 restart schedule while recognizing that the formal justification for the current 14-day Unit 2 and Unit 3 Required Action 3.8.1.B.4 CT duration assumes Unit 1 is not operating, TVA is requesting that the original 7-day CT duration be reinstated in the Unit 2 and Unit 3 TS.

Approval of TS-457 is requested prior to BFN Unit 1 Cycle 7 operation, which is scheduled to begin in Spring 2007. Therefore, TVA is asking that this TS change be approved by January 17, 2007, and that the implementation of the revised TS be made within 60 days of NRC approval or prior to changing the Unit 1 reactor mode to startup, whichever is earlier.

It is TVA's position that the suitability of a 14-day CT for all three BFN units can be demonstrated, and the subject request to return the Unit 2 and Unit 3 TS CT to a 7-day duration is being made only to address the interval until such time this position is adequately presented to NRC. It is TVA's intention to resubmit a request to extend the TS Required Action 3.8.1.B.4 CT to 14 days for all three BFN units prior to the end of calendar year 2007.

#### **4.0 TECHNICAL ANALYSIS**

The basis for this request is technical only in the sense that the return to the previous 7-day CT in the Unit 2 and Unit 3 TS is being made to comply with an existing BFN licensing basis assumption. The formal justification for the current 14-day CT assumes BFN Unit 1 is shutdown, and the near-term restart of Unit 1 will invalidate this assumption.

The requested 7-day CT duration was included as part of the original BFN custom TS for all three units, and this duration was in place during the BFN operating interval between 1973 and 1999. It is apparent that the reinstatement of this original TS duration does not require the depth of technical analysis similar to that which typically accompanies TS change requests.

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BFN Units 2 and 3 - TS 457  
TVA Evaluation of the Proposed Change

**5.0 REGULATORY SAFETY ANALYSIS**

Pursuant to 10 CFR 50.90, the Tennessee Valley Authority (TVA) is submitting a request for a Technical Specifications (TS) change (TS-457) to licenses DPR-52 and DPR-68 for Browns Ferry (BFN) Units 2 and 3, respectively. The proposed change revises the TS Completion Time (CT) for Required Action 3.8.1.B.4 from 14 days to 7 days for restoration of an inoperable emergency diesel generator (EDG). The current 14-day CT was established via a license amendment requested by TVA in March 1997 and approved by NRC in August 1999. Part of the formal basis for that amendment as requested and approved was the assumption that BFN Unit 1 is shutdown. The near-term restart of Unit 1 will invalidate this assumption, therefore, the affected CTs are being returned to the original duration of 7 days.

5.1 No Significant Hazards Consideration

TVA has evaluated whether or not a significant hazards consideration is involved with the proposed TS changes by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of Amendment", as discussed below:

1. Does the proposed Technical Specification change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

The EDGs are designed as backup alternating current (AC) power sources in the event of a loss of offsite power. The proposed restoration of the EDG CT to its original TS duration does not change the conditions, operating configurations, or minimum amount of operating equipment assumed in the safety analysis for accident mitigation. No changes are proposed in the manner in which the EDGs provide plant protection or which create new modes of plant operation. Therefore, the proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed Technical Specification change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

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The proposed amendment does not introduce new equipment which could create a new or different kind of accident. Existing equipment will not be operated in any new modes or for purposes different than it is now utilized. No new external threats, release pathways, or equipment failure modes are created. Therefore, the implementation of the proposed amendment will not create a possibility for an accident of a new or different type than those previously evaluated.

3. Does the proposed Technical Specification change involve a significant reduction in a margin of safety?

Response: No

BFN's emergency AC system is designed with sufficient redundancy such that an EDG may be removed from service for maintenance or testing. The remaining EDGs are capable of carrying sufficient electrical loads to satisfy the UFSAR requirements for accident mitigation or unit safe shutdown. The proposed change does not impact the redundancy or availability requirements of offsite power supplies or change the ability of the plant to cope with station blackout events.

For these reasons, the proposed amendment does not involve a significant reduction in a margin of safety.

Based on the above, TVA concludes that the proposed TS change presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.



Enclosure 1  
BFN Units 2 and 3 - TS 457  
TVA Evaluation of the Proposed Change

**6.0 ENVIRONMENTAL CONSIDERATION**

A review has determined that the proposed TS changes would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed TS changes do not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed TS changes meet the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed TS changes.

Enclosure 1  
BFN Units 2 and 3 - TS 457  
TVA Evaluation of the Proposed Change

**7.0 REFERENCES**

1. TVA letter to NRC, "Browns Ferry Nuclear Plant (BFN) - Units 2 And 3 - Technical Specifications (TS) Change 376 - Extended Emergency Diesel Generator (EDG) Allowed Outage Time (AOT)," March 12, 1997.
2. NRC letter to TVA, "Browns Ferry Nuclear Plant, Units 2 And 3 - Issuance Of Amendments Regarding Authorization Of 14 Day Allowable Outage Time For Emergency Diesel Generators (TAC NOS. M98205 AND M98206)," August 2, 1999.
3. TVA letter to NRC, "Browns Ferry Nuclear Plant (BFN) Unit 1 - Technical Specification (TS) Change TS 426 - Revision to Diesel Generators Allowed Outage Time," December 6, 2004.
4. NRC letter to TVA, "Browns Ferry Nuclear Plant, Unit 1 - Request For Additional Information Regarding Extended Allowable Outage Time For Inoperable Diesel Generator (TAC NO. MC5254) (TS-426)," August 30, 2005.
5. TVA letter to NRC, "Browns Ferry Nuclear Plant (BFN) - Unit 1 - Technical Specifications (TS) Change 426 - Response To Request For Additional Information Regarding Revision To Diesel Generators Allowed Outage Time (TAC NO. MC5254)," October 28, 2005.
6. TVA letter to NRC, "Browns Ferry Nuclear Plant (BFN) - Unit 1 - Withdrawal Of Technical Specification (TS) Change 426 - Revision To Diesel Generators Allowed Outage Time," August 4, 2006.
7. NRC letter to TVA, "Browns Ferry Nuclear Plant, Unit 1 - Withdrawal Of License Amendment Request To Revise Diesel Generators Allowed Outage Time (TAC NO. MC5254)," August 17, 2006.

Enclosure 2

Browns Ferry Nuclear Plant (BFN) Units 2 and 3

Technical Specifications (TS) Change TS-457  
Change Of Emergency Diesel Generator (EDG) Completion time (CT)  
From 14 Days To 7 Days

Proposed Technical Specification Changes (mark-up)

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ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. (continued)	B.2 Declare required feature(s), supported by the inoperable Unit 1 and 2 DG, inoperable when the redundant required feature(s) are inoperable.	4 hours from discovery of Condition B concurrent with inoperability of redundant required feature(s)
	<u>AND</u>	
	B.3.1 Determine OPERABLE Unit 1 and 2 DG(s) are not inoperable due to common cause failure.	24 hours
	<u>OR</u>	
	B.3.2 Perform SR 3.8.1.1 for OPERABLE Unit 1 and 2 DG(s).	24 hours
<u>AND</u>		
B.4 Restore Unit 1 and 2 DG to OPERABLE status.		14 days
	<u>AND</u>	14 days from discovery of failure to meet LCO

**7 days**

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. (continued)	B.2 Declare required feature(s), supported by the inoperable Unit 3 DG, inoperable when the redundant required feature(s) are inoperable.	4 hours from discovery of Condition B concurrent with inoperability of redundant required feature(s)
	<u>AND</u>	
	B.3.1 Determine OPERABLE Unit 3 DG(s) are not inoperable due to common cause failure.	24 hours
	<u>OR</u>	
	B.3.2 Perform SR 3.8.1.1 for OPERABLE Unit 3 DG(s).	24 hours
<u>AND</u>		
B.4 Restore Unit 3 DG to OPERABLE status.		14 days
	<u>AND</u>	14 days from discovery of failure to meet LCO

**7 days**

(continued)