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TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401 5N 157B Lookout Place

JAN 14 1988

TVA-BFN-TS-237

10 CFR 50.90

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

Gentlemen:

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

BROWNS FERRY NUCLEAR PLANT (BFN) - TVA BFN TECHNICAL SPECIFICATION 237

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In accordance with the provisions of 10 CFR 50.4 and 50.90, we are submitting a request for amendment to licenses DPR-33, DPR-52, and DPR-68 to change the Browns Ferry Nuclear Plant Technical Specifications for units 1, 2, and 3 (enclosure 1).

This proposed amendment will revise two incorrect footnote references: one in Table 3.2.B, Instrumentation that Initiates or Controls the Core and Containment Systems, and one in Table 4.2.K, Radioactive Gaseous Effluent Instrumentation Surveillance. This amendment has been identified as a restart requirement. Description, reason for change, and justification in support of the proposed changes are enclosed (enclosure 2). A proposed determination of no significant hazards consideration is provided in enclosure 3.

Enclosed is a check for the \$150 amendment fee required by 10 CFR Part 170.12. We request that these specifications be made effective 30 days after issuance.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

R. Gridley, Director Nuclear Licensing and Regulatóry Affairs

Subscribed and sworn this <u>14 La</u> day of <u>Paulette</u> J. W Notary Public	to before me
Paulette D. W	Rite
Notary Public My Commission Expires	8-24-88

Enclosures cc: See page 2



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U.S. Nuclear Regulatory Commission

JAN 14 1988

cc (Enclosures):

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ENCLOSURE 1

PROPOSED TECHNICAL SPECIFICATIONS REVISIONS

BROWNS FERRY NUCLEAR PLANT

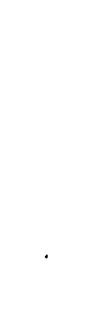
UNITS 1, 2, AND 3

(TVA BFN TS 237)



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ENCLOSURE 2

DESCRIPTION AND JUSTIFICATION BROWNS FERRY NUCLEAR PLANT (BFN) UNITS 1, 2, AND 3

Description of Change

The proposed amendment involves two similar changes.

The first change is applicable to BFN units 1 and 2 only. It is to correct a footnote referenced in Table 3.2.B, Instrumentation that Initiates or Controls the Core and Containment Cooling Systems. The table entry (page 3.2/4.2-14) for reactor low water level, which in conjunction with other signals will initiate the automatic depressurization system (ADS), is changed to reference note 16 instead of 14.

The second change applies to all three BFN units. It will delete the reference to footnote 4 in Table 4.2.K, Radioactive Gaseous Effluent Instrumentation Surveillance, for entry number 5 (offgas hydrogen analyzer). This change effects page 3.2/4.2-62 for units 1 and 2, and page 3.2/4.2-61 for unit 3.

Reason for Change

The first change is to correct a footnote referenced in table 3.2.B. The current footnote referenced for the reactor low water level trip switch which initiates ADS is footnote 14. This footnote states that a residual heat removal service water (RHRSW) pump would be inoperable. However, there is no logical connection between this particular switch or its intended function and the RHRSW system. The footnote to which this reference is being changed is number 16. This footnote allows one ADS trip s/stem to be out of service for up to 8 hours in order to perform functional testing.

The second change must be made to the entry in table 4.2.K for the offgas hydrogen analyzer since its current footnote (number 4) states that there is an automatic isolation signal coming from this instrument; however, no such isolation signal exists.

Justification for Change

The first change is to correct a footnote reference in table 3.2.B for the reactor low level trip switch which initiates ADS. The current note that is referenced is inappropriate since it states that an RHRSW pump should be declared inoperable, but operation of this switch is not necessary for the RHRSW or EECW systems to perform their safety functions. The note that will be referenced allows one ADS trip channel to be out of service for 8 hours to perform functional testing and calibration. This note is already referenced for other ADS instrumentation and is currently referenced in the BFN unit 3 Technical Specifications (TS) for this particular instrument channel. The error was apparently introduced sometime after the TS were reissued on August 20, 1976, since this amendment clearly contains the reference to note 16 instead of the current note 14. No amendment has been found which discusses



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Justification for Change (Cont'd)

changing this note. However, amendment numbers 40 and 28 for units 1 and 2 respectively issued on August 2, 1978, were particularly illegible at the point where this note is referenced, and may be the source of the error. For these reasons, TVA has determined that this change will correct an error and therefore will not reduce the margin of nuclear safety.

The second change will correct an error in the note referenced for the offgas hydrogen analyzer in table 4.2.K. The current note (number 4) states that the functional test of the channel will demonstrate that automatic isolation of the offgas line occurs when the channel trips. However, this instrument channel was not designed to produce an isolation signal.

The Final Safety Analysis Report (FSAR) does not take credit for or mention an isolation signal coming from the hydrogen analyzers on the offgas system. It only refers to a control room annunciation which does exist for high hydrogen concentrations. Also, NUREG 0483, Revision 3, "Standard Radiological Effluent Technical Specifications for Boiling Water Reactor," which provides model TS for this table, does not require such an isolation signal. Furthermore, it would not be an appropriate action to isolate the offgas system on an increasing hydrogen concentration for two reasons. First, hydrogen is not toxic or radioactive and therefore would not pose any threat to the public if released. Second, isolating the offgas system with an increasing hydrogen concentration could produce an explosive atmosphere in the condenser or offgas system, while continuing to operate the system would dilute and disperse the hydrogen, thereby reducing the possibility of explosion.

For these reasons, TVA has determined that this change will correct an error and therefore will not reduce the margin of nuclear safety.





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DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION BROWNS FERRY NUCLEAR PLANT (BFN) UNITS 1, 2, AND 3

Description of Amendment

The proposed amendment would correct the BFN units 1 and 2 technical specification (TS) to reference an applicable note for the reactor low water level instrument channel that functions to initiate the automatic depressurization system (ADS). The note that is currently referenced deals with declaring a Residual Heat Removal Service Water (RHRSW) pump inoperable. However, the RHRSW system does not depend upon this instrument channel. The note that is to be referenced allows 8 hours to perform functional tests and calibration on one trip system at a time. It is already referenced on other ADS instrument channels which perform a similar function and in the BFN unit 3 TS for this particular instrument channel.

Additionally, the proposed amendment would change the BFN units 1, 2, and 3 TS to delete an incorrect note referenced in table 4.2.K, "Radioactive Gaseous Effluent Instrumentation Surveillance." The table entry for the functional testing requirement of the offgas hydrogen analyzer erroneously contains a reference to a note that states that the functional test will demonstrate an isolation of the offgas system. However, this instrument was not designed nor was it ever intended to provide an isolation signal.

Basis for Proposed No Significant Hazards Consideration Determination

NRC has provided standards for determining whether a significant hazards consideration exists as stated in 10 CFR 50.92(c). A proposed amendment to an operating license involves no significant hazards considerations if operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated, or (2) create the possibility of a new or different kind of accident from an accident previously evaluated, or (3) involve a significant reduction in a margin of safety.

- The proposed corrections do not result in a change in the current plant configuration. Rather, they correct table entries in the TS consistent with the present plant design and function of the instruments involved. Therefore, the proposed corrections will not increase the probability or consequences of an accident previously evaluated.
- 2. The change to the ADS instrument note will correct a typographical error and make the BFN Unit 1 and 2 Technical Specifications consistent with unit 3 and the industry standards for functional testing of this type of instrument.

Basis for Proposed No Significant Hazards Consideration Determination (Cont'd)

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The change to delete the hydrogen analyzer note has been essentially evaluated by NUREG 0473 Revision 3, "Standard Radiological Effluent Technical Specification for Boiling Water Reactor", which is applicable to BFN. This NUREG does not contain any similar requirements to the note to be deleted from the BFN TS.

The proposed amendment will not eliminate or modify any protective functions currently installed at the plant, nor will it permit any new operational conditions. Therefore, the proposed amendment does not create the possibility of a new or different kind of accident from any previously evaluated.

3. The proposed amendment will remove errors from the TS and is consistent with the guidance provided by NRC in NUREG 0473 Rev 3. Therefore, it will not involve a significant reduction in a margin of safety.

Since the application for amendment involves a proposed change that is encompassed by the criteria for which no significant hazards consideration exists, TVA has made a proposed determination that the application involves no significant hazards consideration.

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NOTES FOR TABLE 3.2.B (Continued)

10. Only one trip system for each cooler fan.

- 11. In only two of the four 4160 V shutdown boards. See note 13.
- 12. In only one of the four 4160 V shutdown boards. See note 13.
- 13. An emergency 4160 V shutdown board is considered a trip system.
- 14. RHRSW pump would be inoperable. Refer to Section 4.5.C for the requirements of a RHRSW pump being inoperable.
- 15. The accident signal is the satisfactory completion of a one-out-of-two taken twice logic of the drywell high pressure plus low reactor pressure or the vessel low water level (\geq 378" above vessel zero) originating in the core spray system trip system.
- 16. The ADS circuitry is capable of accomplishing its protective action with one operable trip system. Therefore one trip system may be taken out of service for functional testing and calibration for a period not to exceed eight hours.
- 17. Two RPT systems exist, either of which will trip both recirculation pumps. The systems will be individually functionally tested monthly. If the test period for one RPT system exceeds two consecutive hours, the system will be declared inoperable. If both RPT systems are inoperable or if 1 RPT system is inoperable for more than 72 hours, an orderly power reduction shall be initiated and reactor power shall be less than 85 percent within four hours.