

ENCLOSURE 1

PROPOSED TECHNICAL SPECIFICATIONS REVISIONS

BROWNS FERRY NUCLEAR PLANT

UNITS 1, 2, AND 3

(TVA BFN TS 229)

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3.7/4.7 CONTAINMENT SYSTEMS

LIMITING CONDITIONS FOR OPERATION

3.7.D. Primary Containment Isolation Valves

2. In the event any isolation valve specified in Table 3.7.A becomes INOPERABLE, reactor power operation may continue provided at least one valve in each line having an INOPERABLE valve is in the mode corresponding to the isolated condition.
3. If Specification 3.7.D.1 and 3.7.D.2 cannot be met, an orderly shutdown shall be initiated and the reactor shall be in the Cold Shutdown condition within 24 hours.

SURVEILLANCE REQUIREMENTS

4.7.D. Primary Containment Isolation Valves

4.7.D.1.b (Cont'd)

- (2) With the reactor power less than 75%, trip main steam isolation valves individually and verify closure time.
- c. (Deleted)
- d. At least once per operating cycle, the operability of the reactor coolant system instrument line flow check valves shall be verified.
2. Whenever an isolation valve listed in Table 3.7.A is INOPERABLE, the position of at least one other valve in each line having an INOPERABLE valve shall be recorded daily.

3.7/4.7. CONTAINMENT SYSTEMS

LIMITING CONDITIONS FOR OPERATION

3.7.D. Primary Containment Isolation Valves

2. In the event any isolation valve specified in Table 3.7.A becomes INOPERABLE, reactor power operation may continue provided at least one valve in each line having an INOPERABLE valve is in the mode corresponding to the isolated condition.
3. If Specification 3.7.D.1 and 3.7.D.2 cannot be met, an orderly shutdown shall be initiated and the reactor shall be in the Cold Shutdown condition within 24 hours.

SURVEILLANCE REQUIREMENTS

4.7.D. Primary Containment Isolation Valves

4.7.D.1.b (Cont'd)

- (2) With the reactor power less than 75%, trip main steam isolation valves individually and verify closure time.
- c. (Deleted)
- d. At least once per operating cycle, the operability of the reactor coolant system instrument line flow check valves shall be verified.
2. Whenever an isolation valve listed in Table 3.7.A is INOPERABLE, the position of at least one other valve in each line having an INOPERABLE valve shall be recorded daily.

3.7/4.7. CONTAINMENT SYSTEMS

LIMITING CONDITIONS FOR OPERATION

3.7.D. Primary Containment Isolation Valves

2. In the event any isolation valve specified in Table 3.7.A becomes INOPERABLE, reactor power operation may continue provided at least one valve in each line having an INOPERABLE valve is in the mode corresponding to the isolated condition.
3. If Specification 3.7.D.1 and 3.7.D.2 cannot be met, an orderly shutdown shall be initiated and the reactor shall be in the Cold Shutdown condition within 24 hours.

SURVEILLANCE REQUIREMENTS

4.7.D. Primary Containment Isolation Valves

4.7.D.1.b (Cont'd)

- (2) With the reactor power less than 75%, trip main steam isolation valves individually and verify closure time.
- c. (Deleted).
- d. At least once per operating cycle, the operability of the reactor coolant system instrument line flow check valves shall be verified.
2. Whenever an isolation valve listed in Table 3.7.A is INOPERABLE, the position of at least one other valve in each line having an INOPERABLE valve shall be recorded daily.

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

Description of Change

The amendment would delete surveillance requirement 4.7.D.1.C, the twice per week partial closure test of the main steam isolation valves (MSIVs) for units 1, 2, and 3. Deletion of this test requirement would allow the valve partial closure to be tested quarterly, consistent with the requirement in table 4.1.A for the Reactor Protection System (RPS) scram on MSIV closure.

Reason for Change

This change would remove excessive testing requirements for the MSIVs. The result would be less burden on and distraction of the control room operators and a decrease in the probability of accidental transients caused during performance of the surveillance test.

Justification for Change

Two MSIVs, one on each side of the primary containment barrier, in each of four main steam lines, close automatically to prevent damage to the fuel barrier during a loss of coolant accident outside the primary containment and/or limit release of radioactive materials to the environment after a postulated accident. Deletion of the requirement to conduct an MSIV partial closure test as described in FSAR section 4.6.5 twice per week will result in a decrease in the probability of inadvertent scrams and transients and, therefore, an increase in safety. (The pushbutton used for this test has been involved in five unit scrams at BFN since 1977.) This increase in safety may be partially offset by the decrease in surveillance frequency for the MSIVs; however, this decrease is limited by the surveillance requirement in table 4.1.A which requires the MSIVs to be partially closed at least once per quarter to functionally test the RPS scram for MSIV closure. Also, the MSIVs will still be tested in accordance with SR 4.7.D.1.B., which is consistent with the valve testing requirement of ASME Section XI.

The twice-weekly test only demonstrates that the mechanical portion of the MSIV is not stuck in the open position because it does not utilize the controls which normally trip the MSIVs. Failure of the mechanical portion of the valve has not been a dominant failure mode. The valve vendor, Atwood and Morill, has provided concurrence with the once per quarter testing frequency.

Finally, this amendment would be consistent with the guidance provided by NRC in NUREG-0737, Item II.K.3.16, reducing challenges to the relief valves by reducing MSIV testing. Therefore, TVA concludes that no significant reduction in the margin of safety will occur as a result of this amendment.

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

Description of Amendment Request

The amendment would delete the twice per week closure test of the main steam isolation valves (MSIVs). Deletion of this test requirement would allow the partial closure to be tested quarterly, consistent with the requirements of table 4.1.A for functionally testing the reactor scram on MSIV closure.

Basis for Proposed No Significant Hazards Consideration Determination

The Commission 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 for a facility involves no significant hazards consideration if operating of the facility in accordance with a 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 any accident previously evaluated, or (3) involve a significant reduction in a margin of safety.

A discussion of these standards as they relate to this amendment follow.

1. The proposed amendment would not involve a significant increase in the probability or consequences of an accident previously evaluated because the technical specification change will not eliminate or modify any protection functions nor permit any new operational conditions. However, it does decrease the frequency of surveillance testing on the MSIVs and, therefore, may result in some decrease in reliability of the MSIVs. However, any decrease associated with this change is shown to be insignificant for the following reasons. The nuclear industry, and BFN in particular, have both demonstrated a high degree of reliability in MSIV closure. The MSIVs will still be tested in accordance with ASME Section XI testing requirements, which have been accepted as sufficient. Finally, the MSIVs will be tested beyond that of ASME Section XI by the requirement to perform a partial closure of the MSIVs once per quarter to test a Reactor Protection System (RPS) scram.
2. Likewise, the change would not create the possibility of a new or different kind of accident since deletion of a surveillance requirement does not modify plant equipment or provide any new operational conditions.

Basis for Proposed No Significant Hazards Consideration Determination
(Continued)

3. Finally, the proposed amendment does not involve a significant reduction in a margin of safety since the remaining technical specifications would still require the MSIVs to be operated quarterly. The requirement to test the MSIVs per specification 4.7.D.1.b will also remain in the technical specifications. Furthermore, deletion of this testing requirement will result in a decrease in the probability of accidental transients which have been caused during the performance of this test. The amendment is also consistent with the guidance provided by NRC in NUREG-0737, Item II.K.3.16.

Therefore, TVA proposes to determine that the proposed amendment does not involve a significant hazards consideration.

