ENCLOSURE 1

PROPOSED TECHNICAL SPECIFICATION REVISIONS
BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
(TVA BFNP TS 200)

PROPOSED UNIT 1 TECHNICAL SPECIFICATION REVISIONS

LIMITING CONDITIONS FOR OPERATION

3.1 REACTOR PROTECTION SYSTEM

Applicability

Applies to the instrumentation and associated devices which initiate a reactor scram.

Objective

To assure the operability of the reactor protection system.

Specification

A.1 When there is fuel in the vessel, the setpoints, minimum number of trip systems, and minimum number of instrument channels that must be operable for each position of the reactor mode switch shall be as given in Table 3.1.A.

2 When it is determined that one channel is failed in the unsafe condition, that channel containing the unsafe failure will be tripped within one hour.

B. Two RPS power monitoring channels for each inservice RPS MG sets or alternate source shall be operable.

1. With one RPS electric power monitoring channel for inservice RPS MG set or alternate power supply inoperable, restore the inoperable channel to operable status within 72 hours or remove the associated RPS MG set or alternate power supply from service.

SURVEILLANCE REQUIREMENTS

4.1 REACTOR PROTECTION SYSTEM

Applicability

Applies to the surveillance of the instrumentation and associated devices which initiate reactor scram.

Objective

To specify the type and frequency of surveillance to be applied to the protection instrumentation.

Specification

A. Instrumentation systems shall be functionally tested and calibrated as indicated in Tables 4.1.A and 4.1.B respectively.

PROPOSED UNIT 2 TECHNICAL SPECIFICATION REVISIONS

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.1 REACTOR PROTECTION SYSTEM	4.1 REACTOR PROTECTION SYSTEM
Applicability Applies to the instrumentation and associated devices which initiate a reactor scram.	Applicability Applies to the surveillance of the instrumentation and associated devices which initiate reactor scram.
Objective To assure the operability of the reactor protection system.	Objective To specify the type and frequency of surveillance to be applied to the protection instrumentation.
Specification A. 1 When there is fuel in the vessel, the setpoints, minimum number of trip systems, and minimum number of instrument channels that must be operable for each position of the reactor mode switch shall be as given in Table 3.1.A. 2 When it is determined that one channel is failed in the unsafe condition, that channel containing the unsafe failure will be tripped within one hour.	Specification A. Instrumentation systems shall be functionally tested and calibrated as indicated in Tables 4.1.A and 4.1.B respectively. B. Daily during reactor power operation at greater than or equal to 25% thermal power, the ratio of fraction of Rated Power (FRP) to Core Maximum Fraction of Limiting Power Density (CMFLPD) shall be checked and the scram and APRM Rod Block settings given by equations in specifications 2.1.A.1 and 2.1.B shall be calculated.

Unit 2

PROPOSED UNIT 3 TECHNICAL SPECIFICATION REVISIONS

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.1 REACTOR PROTECTION SYSTEM	4.1 REACTOR PROTECTION SYSTEM
Applicability Applies to the instrumentation and associated devices which initiate a reactor scram.	Applicability Applies to the surveillance of the instrumentation and associated devices which initiate reactor scram.
Objective To assure the operability of the reactor protection system.	Objective To specify the type and frequency of surveillance to be applied to the protection instrumentation.
Specification A. 1 When there is fuel in the vessel, the setpoints, minimum number of trip systems, and minimum number of instrument channels that must be operable for each position of the reactor mode switch shall be as given in Table 3.1.A. 2 When it is determined that one channel is failed in the unsafe condition, that channel containing the unsafe failure will be tripped within one hour.	Specification A. Instrumentation systems shall be functionally tested and calibrated as indicated in Tables 4.1.A and 4.1.B respectively. B. Daily during reactor power operation at greater than or equal to 25% thermal power, the ratio of fraction of Rated Power (FRP) to Core Maximum Fraction of Limiting Power Density (CMFLPD) shall be checked and the scram and APRM Rod Block settings given by equations in specifications 2.1.A.1 and 2.1.B shall be calculated.

Unit 3

ENCLOSURE 2
DESCRIPTION AND JUSTIFICATION
(TVA BFNP TS 200)

Description of Change:

Technical specification section 4.1.C contains a requirement that upon the failure of a reactor protection system (RPS) channel in the unsafe condition all RPS channels monitoring the same variable must be functionally tested. This testing must be performed immediately before the trip system containing the failure is tripped. The trip system may be in the untripped position for up to eight hours to perform the functional test.

The RPS is made up of two independent trip systems. There are usually four channels provided to monitor each critical parameter, with two channels in each trip system. The outputs of the channels in a trip system are combined in logic such that either channel trip will trip that trip system. The simultaneous tripping of both trip systems will produce a reactor scram.

An unsafe failure means that the failure did not result in tripping the channel and thus the trip system. Testing the other channels ensures that there are no other unsafe failures. However, in order to do this testing, the trip system containing the failure can be left as is for up to eight hours in order to test the other trip system.

The proposed revision is to delete the functional test requirement and replace it with a requirement to trip the channel containing the failure within one hour. The proposed amendment reflects that of the Standard Technical Specifications.

Justification:

The FSAR section 7.2.2.7b states: "Any one intentional bypass, maintenance operation, calibration operation, or test to verify operational availability shall not impair the ability of the reactor protection system to respond correctly." The current technical specifications allow leaving the trip system containing the unsafe failure in the untripped condition for up to eight hours in order to functionally test the other trip system. This could possibly lead to a situation which could impair the ability of the RPS to respond correctly. By tripping the channel within one hour, the probability of impairing the response of the RPS is decreased, and thus, the margin of safety is increased. The proposed revision also makes this section like that in the Standard Technical Specifications.

ENCLOSURE 3

PROPOSED NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

(TVA BFNP TS 200)

Description of Change:

Technical specification section 4.1.C contains a requirement that upon the failure of a reactor protection system (RPS) channel in the unsafe condition all RPS channels monitoring the same variable must be functionally tested. This testing must be performed immediately before the trip system containing the failure is tripped. The trip system may be in the untripped position for up to eight hours to perform the functional test.

The RPS is made up of two independent trip systems. There are usually four channels provided to monitor each critical parameter, with two channels in each trip system. The outputs of the channels in a trip system are combined in logic such that either channel trip will trip that trip system. The simultaneous tripping of both trip systems will produce a reactor scram.

An unsafe failure means that the failure did not result in tripping the channel and thus the trip system. Testing the other channels ensures that there are no other unsafe failures. However, in order to do this testing, the trip system containing the failure can be left as is for up to eight hours in order to test the other trip system.

The proposed revision is to delete the functional test requirement and replace it with a requirement to trip the channel containing the failure within one hour. The proposed amendment reflects that of the Standard Technical Specifications.

Basis for Proposed No Significant Hazards Determination:

NRC has provided guidance concerning the application of the standards by providing examples of actions that are not likely to involve significant hazards considerations (48FR14870). One example of actions not likely to involve a significant hazards consideration is a change which either may result in some increase to the probability or consequences of a previously-analyzed accident or may reduce in some way a safety margin, but where the results of the change are clearly within all acceptable criteria with respect to the system or component specified in the Standard Review Plan.

The proposed amendment is encompassed by this example in that the revision reflects the requirements established in the Standard Technical Specifications. Also, by tripping the channel in one hour as opposed to eight hours, the probability of impairing the ability of the RPS to respond correctly is decreased. This results in an increase in the margin of safety.

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