Industry/TSTF Standard Technical Specification Change Traveler

Incorporate approved topical BAW-10167, Supplement 3 in SR 3.3.3.1 and SR 3.3.4.1

Priority/Classification: 1) Correct Specifications

NUREGs Affected: ☑ 1430 ☐ 1431 ☐ 1432 ☐ 1433 ☐ 1434

Description:

The Frequency for performance of SR 3.3.3.1 and SR 3.3.4.1 has been revised to "[23] days on a STAGGERED TEST BASIS." SR 3.3.3.1 is modified to delete the SR Note. The Bases are changed accordingly.

Justification:

B&W Topical Report BAW-10167, Supplement 3 was approved by the NRC in an SER dated January 7, 1998, for all B&W plants except TMI. This Topical justified a Surveillance Test Interval of 23 days on a STAGGERED TEST BASIS for the Reactor Trip Devices consisting of the Reactor Trip Modules (RTMs), CRD Breakers, and Electronic Trip Relays. The Frequencies specified for SRs 3.3.3.1 and 3.3.4.1 were "[45] days on a STAGGERED TEST BASIS" and "31 days", respectively. According to the SER for the Topical, all B&W plants except TMI are allowed to revise their test intervals for the Reactor Trip Devices to "23 days on a STAGGERED TEST BASIS" with no further justifications or evaluations. Since TMI was not represented in the Topical evaluation, the proposed Frequency has not been evaluated for that plant. The Reviewer's Note associated with SR 3.3.3.1 Bases has been revised to properly characterize the use of the specified Frequency, and the same Reviewer's Note has been added to the Bases associated with SR 3.3.4.1. The Bases References associated with 3.3.3 and 3.3.4 have been revised to incorporate the approved Topical.

The Reactor Trip Module is not capable of being bypassed during testing. It is either in service or in the tripped condition. Therefore, the SR 3.3.3.1 note is unnecessary and confusing. The Bases associated with the Note have been deleted.

Revision History

OG Revision 0 Revision Status: Closed

Revision Proposed by Oconee

Revision Description:
Original Issue

Owners Group Review Information

Date Originated by OG: 06-Nov-97

Owners Group Comments
ONS-003

Owners Group Resolution: Approved Date: 06-Nov-97

TSTF Review Information

TSTF Received Date: 06-Nov-97 Date Distributed for Review 15-Dec-97

OG Review Completed: ☑ BWOG ☑ WOG ☑ CEOG ☑ BWROG

TSTF Comments:

Enhance justification to address the fact that the frequency of 31 days is currently approved in the old STS - need to evaluate the impact of topical. BWOG only

TSTF Resolution: Approved Date: 05-Feb-98

OG Revision 0 **Revision Status: Closed**

NRC Review Information

NRC Received Date: 03-Mar-98 NRC Reviewer:

NRC Comments:

Superceded by BWOG revision.

Final Resolution: TSTF Withdraws Final Resolution Date: 18-Mar-98

TSTF Revision 1 **Revision Status: Active** **Next Action: EXCEL**

Revision Proposed by BWOG

Revision Description:
Complete replacement of TSTF-212, Rev. 0.

Owners Group Review Information

Date Originated by OG: 18-Mar-98

Owners Group Comments
(No Comments)

Owners Group Resolution: Approved Date: 18-Mar-98

TSTF Review Information

TSTF Received Date: 18-Mar-98 Date Distributed for Review 28-May-98

OG Review Completed: ☑ BWOG ☑ WOG ☑ CEOG ☑ BWROG

TSTF Comments:

(No Comments)

TSTF Resolution: Approved Date: 10-Jul-98

Incorporation Into the NUREGs

File to BBS/LAN Date: TSTF Informed Date: TSTF Approved Date:

NUREG Rev Incorporated:

Affected Technical Specifications

Ref. 3.3.3 Bases	RPS-RTM
	Change Description: Deleted Reference 2
SR 3.3.3.1	RPS-RTM
SR 3.3.3.1 Bases	RPS-RTM
Ref. 3.3.4 Bases	CRD Trip Devices
	Change Description: Added Ref. 2
SR 3.3.4.1	CRD Trip Devices

TSTF-212, Rev 1

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. Required Action and associated Completion Time not met in MODE 4 or 5.	C.1 Open all CRD trip breakers. OR	6 hours
	C.2 Remove all power to the CRD System.	6 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.3.3.1	----------NOTE---------- When an RTM is placed in an inoperable status solely for performance of this Surveillance, entry into associated Conditions and Required Actions may be delayed for up to 8 hours, provided at least two RTM channels are OPERABLE. ---------- Perform CHANNEL FUNCTIONAL TEST.	23 [45] days on a STAGGERED TEST BASIS

TSTF-212, Rev. 1

ACTIONS (continued)

CONDITION	REQUIRED ACTION		COMPLETION TIME
C. One or more ETA relays inoperable.	C.1	Transfer affected CONTROL ROD group to power supply with OPERABLE ETA relays.	1 hour
	OR		
	C.2	Trip corresponding AC CRD trip breaker.	1 hour
D. Required Action and associated Completion Time not met in MODE 1, 2, or 3.	D.1	Be in MODE 3.	6 hours
	AND		
	D.2.1	Open all CRD trip breakers.	6 hours
	OR		
	D.2.2	Remove all power to the CRD System.	6 hours
E. Required Action and associated Completion Time not met in MODE 4 or 5.	E.1	Open all CRD trip breakers.	6 hours
	OR		
	E.2	Remove all power to the CRD System.	6 hours

On a STAGGERED TEST BASIS

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.3.4.1 Perform CHANNEL FUNCTIONAL TEST.	[23] ~~31~~ days

TSTF-212, Rev. 1

INSERT B 3.3-37

No further evaluations or justifications are required for the evaluated plants to incorporate the 23 day STAGGERED TEST BASIS Frequency.

INSERT B 3.3-44A

[Reviewer's Note: The CHANNEL FUNCTIONAL TEST Frequency is approved for all B&W plants except for TMI based on an approved topical report. No further evaluations or justifications are required for the evaluated plants to incorporate the 23 day STAGGERED TEST BASIS Frequency.]

INSERT B 3.3-44B

Calculations have shown that the Frequency (23 days) maintains a high level of reliability of the Reactor Trip System in BAW-10167A, Supplement 3 (Ref. 2).

ACTIONS

B.1, B.2.1, and B.2.2 (continued)

which the LCO does not apply. This is done by placing the unit in at least MODE 3 with all CRD trip breakers open or with all power to the CRD System removed within 6 hours. The allowed Completion Time of 6 hours is reasonable, based on operating experience, to reach MODE 3 from full power conditions in an orderly manner and without challenging unit systems.

C.1 and C.2

Condition C applies if the Required Actions of Condition A are not met within the required Completion Time in MODE 4 or 5. In this case, the unit must be placed in a MODE in which the LCO does not apply. This is done by opening all CRD trip breakers or removing all power to the CRD System. The allowed Completion Time of 6 hours is reasonable, based on operating experience, to open all CRD trip breakers or remove all power to the CRD System without challenging unit systems.

SURVEILLANCE REQUIREMENTS

SR 3.3.3.1

The Note defines a channel as being OPERABLE for up to 8 hours while bypassed for Surveillance testing. The Note allows channel bypass for testing without defining it as inoperable although during this time period it cannot actuate a reactor trip. This allowance is based on the assumption of the RPS reliability analysis in BAW-10167 (Ref. 2) that 8 hours is the average time required to perform channel Surveillance. The analysis demonstrated that the 8 hour testing allowance does not significantly reduce the probability that the RPS will trip when necessary. It is not acceptable to routinely remove channels from service for more than 8 hours to perform required Surveillance testing. Such a practice would be contrary to the assumptions of the reliability analysis that justified the LCO's Completion Times.

Reviewer's Note: The CHANNEL FUNCTIONAL TEST Frequency is based on an approved topical report. For a licensee to use approved for all B&W power plants except TMI

<INSERT B 3.3-37>

(continued)

TSTF-212, Rev 1

BASES

SURVEILLANCE REQUIREMENTS

SR 3.3.3.1 (continued)

this Frequency, the licensee must justify the Frequency as required by the NRC Staff SER for the topical report.

(23) The SRs include performance of a CHANNEL FUNCTIONAL TEST every ~~[45]~~ days on a STAGGERED TEST BASIS. This test shall verify the OPERABILITY of the RTM and its ability to receive and properly respond to channel trip and reactor trip signals. Calculations have shown that the Frequency (23) ~~(45~~ days) maintains a high level of reliability of the Reactor Trip System in BAW-10167 (Ref. 2).

(A) Supplement 3

REFERENCES

1. FSAR, Chapter [7].
2. BAW-10167, ~~May 1986~~ Supplement 3, February 1998. (A)

ACTIONS

C.1 and C.2 (continued)

The 1 hour Completion Time is sufficient to perform the Required Action.

D.1, D.2.1, and D.2.2

If the Required Actions of Condition A, B, or C are not met within the required Completion Time in MODE 1, 2, or 3, the unit must be brought to a MODE in which the LCO does not apply. To achieve this status, the unit must be brought to at least MODE 3, with all CRD trip breakers open or with all power to the CRD System removed within 6 hours. The allowed Completion Time of 6 hours is reasonable, based on operating experience, to reach MODE 3 from full power conditions in an orderly manner and without challenging unit systems.

E.1 and E.2

If the Required Actions of Condition A, B, or C are not met within the required Completion Time in MODE 4 or 5, the unit must be brought to a MODE in which the LCO does not apply. To achieve this status, all CRD trip breakers must be opened or all power to the CRD System removed within 6 hours. The allowed Completion Time of 6 hours is reasonable, based on operating experience, to open all CRD trip breakers or remove all power to the CRD System without challenging unit systems.

SURVEILLANCE REQUIREMENTS

SR 3.3.4.1

<INSERT B3.3-44A>

SR 3.3.4.1 is to perform a CHANNEL FUNCTIONAL TEST every ~~31 days~~. This test verifies the OPERABILITY of the trip devices by actuation of the end devices. Also, this test independently verifies the undervoltage and shunt trip mechanisms of the AC breakers. ~~The frequency of 31 days is based on operating experience, which has demonstrated that failure of more than one channel of a given function in any 31 day interval is a rare event.~~

23 days on a STAGGERED TEST BASIS

<INSERT B3.3-44B>

REFERENCES

1. FSAR, Chapter [7].
2. BAW-10167A, Supplement 3, February 1998