

Industry/TSTF Standard Technical Specification Change Traveler

Clarify that remove all power to the CRD system means remove power to CRD trip breakers

Priority/Classification 2) Consistency/Standardization

NUREGs Affected: 1430 1431 1432 1433 1434

Description:

Specification 3.3.3 Required Action B.2.2 and C.2 and Specification 3.3.4 Required Action D.2.2 and E.2 are modified to specify, "Remove power from all CRD trip breakers" instead of "Remove all power to CRD system." The corresponding Bases are revised accordingly.

Justification:

The requirement to remove all power to CRD system could be interpreted to include all control power and logic cabinets since they are a part of this system. It is more appropriate to remove power from all CRD trip breakers. This action places the unit in a condition where the LCO no longer applies.

Revision History

OG Revision 0

Revision Status: Active

Next Action: NRC

Revision Proposed by: Oconee

Revision Description:
Original Issue

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:

1. Enhance the justification to address that the Applicability could be exited just by opening the breakers
2. BWOG only

TSTF Resolution: Approved Date: 05-Feb-98

Incorporation Into the NUREGs

File to BBS/LAN Date:

TSTF Informed Date:

TSTF Approved Date:

NUREG Rev Incorporated:

Affected Technical Specifications

Action 3.3.3.B RPS-TRM

Action 3.3.3.B Bases RPS-TRM

Action 3.3.3.C RPS-TRM

Action 3.3.3.C Bases RPS-TRM

Action 3.3.4.D CRD Trip Devices

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Action 3.3.4.D Bases CRD Trip Devices

Action 3.3.4.E CRD Trip Devices

Action 3.3.4.E Bases CRD Trip Devices

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3.3 INSTRUMENTATION

3.3.3 Reactor Protection System (RPS)—Reactor Trip Module (RTM)

LCO 3.3.3 Four RTMs shall be OPERABLE.

APPLICABILITY: MODES 1 and 2,
MODES 3, 4, and 5 with any CONTROL ROD drive (CRD) trip
breaker in the closed position and the CRD System
capable of rod withdrawal.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One RTM inoperable.	A.1.1 Trip the associated CRD trip breaker.	1 hour
	<u>OR</u>	
	A.1.2 Remove power from the associated CRD trip breaker.	1 hour
	<u>AND</u>	
	A.2 Physically remove the inoperable RTM.	1 hour
B. Required Action and associated Completion Time not met in MODE 1, 2, or 3.	B.1 Be in MODE 3.	6 hours
	<u>AND</u>	
	B.2.1 Open all CRD trip breakers.	6 hours
	<u>OR</u>	
	B.2.2 Remove all power to the CRD system <u>from all CRD trip breakers.</u>	6 hours

(continued)

RPS-RTM
3.3.3

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.	6 hours
	OR C.2 Remove ^{Small} all power to the CRD system . trip breakers.	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.	[45] days on a STAGGERED TEST BASIS

CRD Trip Devices
3.3.4

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 the power to CRD SYSTEM ^{From all} trip breakers.	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 the power to CRD SYSTEM ^{From all} trip breakers.	6 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.3.4.1 Perform CHANNEL FUNCTIONAL TEST.	31 days

BASES

ACTIONS

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

trip breakers

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.

from all

C.1 and C.2

trip breakers.

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.

from all

trip breakers

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

(continued)

CRD Trip Devices
B 3.3.4

BASES

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

from all
trip breakers

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 ~~AP~~ 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

from all

trip breakers

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 ~~AP~~ 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 ~~AP~~ power ~~to the~~ CRD System without challenging unit systems.

from all

trip breakers

SURVEILLANCE
REQUIREMENTS

SR 3.3.4.1

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.

REFERENCES

1. FSAR, Chapter [7].