Industry/TSTF Standard Technical Specification Change Traveler

Revision to EOC-RPT pump actions

Priority/Classification 2) Consistency/Standardization

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

Description:

NUREG-1433 LCO 3.3.4.1, Condition A is revised to eliminate an ambiguity in the application of LCO Requirements. LCO 3.3.4.1 provides the option of having EOC-RPT Pump Trip Instrumentation Operable or applying a MCPR penalty. The change revises Condition A to be applicable whenever one or more "required" channels of EOC-RPT Pump Trip Instrumentation are not Operable. The change also fixes a typographical error in NUREG-1434, Bases Actions A.1 and A.2 to match the words in Condition A of NUREG-1434 LCO 3.3.4.1.

Justification:

The LCO provides an option of either requiring the instrument channels to be Operable or the MCPR penalty to be applied. Thus Condition A should use the word "required" when referring to the instrument channels since they are not always required (i.e., when the MPCR penalty portion of the LCO is being met). This is consistent with the BWR/6 ITS. NUREG-1434. In addition, appropriate Bases changes have been made to NUREG-1433, and these changes are consistent with the NUREG-1434 Bases. Also, it was noted that the NUREG-1434 Bases for the first sentence in Actions A.1 and A.2 did not reflect the actual words in the Technical Specification when referring to the inoperable channels. Therefore, the word "required" was added to the NUREG-1434 Bases.

Revision History

OG Revision 0 Revision Status: Closed

Revision Proposed by: Susquehanna

Revision Description:
Original Issue

Owners Group Review Information

Date Originated by OG: 22-Nov-96

Owners Group Comments
(No Comments)

Owners Group Resolution: Approved Date: 22-Nov-96

TSTF Review Information

TSTF Received Date: 02-Dec-96 Date Distributed for Review 16-May-97

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

TSTF Comments:

Superseded by Rev. 1.

TSTF Resolution: Superceeded Date: 21-Jul-97

OG Revision 1 **Revision Status: Active** **Next Action: NRC**

Revision Proposed by: BWROG

Revision Description:
Changes were made for consistency with the same BWR/6 requirement. The inserted Action A.3 is eliminated and the word "required" added to Condition A (which now reads, "One or more required channels inoperable." The Description was changed accordingly.

Owners Group Review Information

Date Originated by OG: 19-May-97

Owners Group Comments
(No Comments)

Owners Group Resolution: Approved Date: 19-May-97

TSTF Review Information

TSTF Received Date: 19-May-97 Date Distributed for Review 01-Dec-97

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

TSTF Comments:
PWRs - NA. OK.

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 3.3.4.1.A	EOC-RPT Instrumentation	NUREG(s)- 1433 Only
Action 3.3.4.1.A Bases	EOC-RPT Instrumentation	NUREG(s)- 1433 Only
Action 3.3.4.1.A Bases	EOC-RPT Instrumentation	NUREG(s)- 1434 Only

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3.3 INSTRUMENTATION

3.3.4.1 End of Cycle Recirculation Pump Trip (EOC-RPT) Instrumentation

LCO 3.3.4.1 a. Two channels per trip system for each EOC-RPT instrumentation Function listed below shall be OPERABLE:

1. Turbine Stop Valve (TSV)—Closure; and

2. Turbine Control Valve (TCV) Fast Closure, Trip Oil Pressure—Low.

[OR

b. LCO 3.2.2, "MINIMUM CRITICAL POWER RATIO (MCPR)," limits for inoperable EOC-RPT as specified in the COLR are made applicable.]

APPLICABILITY: THERMAL POWER > [30]% RTP.

ACTIONS

---NOTE---
Separate Condition entry is allowed for each channel.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more required channels inoperable.	A.1 Restore channel to OPERABLE status.	72 hours
	OR	
	A.2 ---NOTE--- Not applicable if inoperable channel is the result of an inoperable breaker. --- Place channel in trip.	72 hours

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BASES

ACTIONS (continued)

A.1 and A.2

With one or more required channels inoperable, but with EOC-RPT trip capability maintained (refer to Required Actions B.1 and B.2 Bases), the EOC-RPT System is capable of performing the intended function. However, the reliability and redundancy of the EOC-RPT instrumentation is reduced such that a single failure in the remaining trip system could result in the inability of the EOC-RPT System to perform the intended function. Therefore, only a limited time is allowed to restore compliance with the LCO. Because of the diversity of sensors available to provide trip signals, the low probability of extensive numbers of inoperabilities affecting all diverse Functions, and the low probability of an event requiring the initiation of an EOC-RPT, 72 hours is provided to restore the inoperable channels (Required Action A.1) [or apply the EOC-RPT inoperable MCPR limit]. Alternately, the inoperable channels may be placed in trip (Required Action A.2) since this would conservatively compensate for the inoperability, restore capability to accommodate a single failure, and allow operation to continue. As noted in Required Action A.2, placing the channel in trip with no further restrictions is not allowed if the inoperable channel is the result of an inoperable breaker, since this may not adequately compensate for the inoperable breaker (e.g., the breaker may be inoperable such that it will not open). If it is not desired to place the channel in trip (e.g., as in the case where placing the inoperable channel in trip would result in an RPT), or if the inoperable channel is the result of an inoperable breaker, Condition C must be entered and its Required Actions taken.

B.1 and B.2

Required Actions B.1 and B.2 are intended to ensure that appropriate actions are taken if multiple, inoperable, untripped channels within the same Function result in the Function not maintaining EOC-RPT trip capability. A Function is considered to be maintaining EOC-RPT trip capability when sufficient channels are OPERABLE or in trip, such that the EOC-RPT System will generate a trip signal from the given Function on a valid signal and both recirculation pumps can be tripped. This requires two channels of the Function in the same trip system, to each be OPERABLE or in trip, and the associated EOC-RPT breakers to

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BASES

ACTIONS (continued)

[the times, the licensee must justify the Completion Times as required by the staff Safety Evaluation Report (SER) for the topical report.]

A Note has been provided to modify the ACTIONS related to EOC-RPT instrumentation channels. Section 1.3, Completion Times, specifies that once a Condition has been entered, subsequent divisions, subsystems, components, or variables expressed in the Condition, discovered to be inoperable or not within limits, will not result in separate entry into the Condition. Section 1.3 also specifies that Required Actions of the Condition continue to apply for each additional failure, with Completion Times based on initial entry into the Condition. However, the Required Actions for inoperable EOC-RPT instrumentation channels provide appropriate compensatory measures for separate inoperable channels. As such, a Note has been provided that allows separate Condition entry for each inoperable EOC-RPT instrumentation channel.

A.1 and A.2

With one or more required channels inoperable, but with EOC-RPT trip capability maintained (refer to Required Action B.1 and B.2 Bases), the EOC-RPT System is capable of performing the intended function. However, the reliability and redundancy of the EOC-RPT instrumentation is reduced such that a single failure in the remaining trip system could result in the inability of the EOC-RPT System to perform the intended function. Therefore, only a limited time is allowed to restore compliance with the LCO. Because of the diversity of sensors available to provide trip signals, the low probability of extensive numbers of inoperabilities affecting all diverse Functions, and the low probability of an event requiring the initiation of an EOC-RPT, 72 hours is allowed to restore the inoperable channels (Required Action A.1) [or apply the EOC-RPT inoperable MCPR limit]. Alternately, the inoperable channels may be placed in trip (Required Action A.2) since this would conservatively compensate for the inoperability, restore capability to accommodate a single failure, and allow operation to continue. As noted in Required Action A.2, placing the channel in trip with no further restrictions is not allowed if the inoperable channel is the result of an inoperable breaker, since this may not adequately compensate for the

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