
Industry/TSTF Standard Technical Specification Change Traveler

3.1.5 Safety Rod Insertion Limits, Required Action A.1 Deletion

Priority/Classification 1) Correct Specifications

NUREGs Affected: 1430 1431 1432 1433 1434

Description:

Delete Required Action A.1 and associated Completion Time from Specification 3.1.5 Actions.

Justification:

NUREG 1430, Specification 3.1.5 Required Action and Completion Time A.1 are deleted and subsequent Required Actions are renumbered. This deletion is made because this Required Action is not necessary. Taking action to reestablish compliance with the LCO is always an option and need not be specified separately. Removal of this Required Action eliminates the potentially confusing specification of an action which is always an option in every Specification. This change neither adds any new requirements nor does it remove any requirements from this specification.

Revision History

OG Revision 0

Revision Status: Closed

Revision Proposed by: ANO-1

Revision Description:
Original Issue

Owners Group Review Information

Date Originated by OG: 01-Oct-96

Owners Group Comments
Designated ANO-1-08

Owners Group Resolution: Approved Date: 17-Sep-96

TSTF Review Information

TSTF Received Date: 01-Nov-96 Date Distributed for Review 05-Dec-96

OG Review Completed: BWO WOG CEOG BWROG

TSTF Comments:

CEOG - Not applicable, accepts

WOG - Not applicable, accepts

BWROG - Not applicable, accepts

Additional comments received from the BWO on 1/13/97. On hold for resolution.

TSTF Resolution: Approved Date: 07-Jan-97

2/17/98

NRC Review Information

NRC Received Date: 24-Jan-97 NRC Reviewer: Tjader, R.

NRC Comments:

NOTE: TSTF-155 through 160 were inadvertently submitted to the NRC without BWOG approval. The NRC was informed in February to ignore the travelers until BWOG review and approval could be obtained.

Final Resolution: TSTF Withdraws Final Resolution Date: 27-Mar-97

TSTF Revision 1 Revision Status: Active Next Action: EXCEL

Revision Proposed by: BWOG

Revision Description:

After further review, BWOG-29 (TSTF-158), was approved by the BWOG without changes. Revision 1 was issued to facilitate tracking.

Owners Group Review Information

Date Originated by OG: 06-Nov-97

Owners Group Comments
(No Comments)

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

TSTF Review Information

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

OG Review Completed: BWOG WOG CEOG BWROG

TSTF Comments:
(No Comments)

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 3.1.5.A Safety Rod Insertion Limits

Action 3.1.5.A Bases Safety Rod Insertion Limits

2/17/98

TSTF-15B, Rev. 1

3.1 REACTIVITY CONTROL SYSTEMS

3.1.5 Safety Rod Insertion Limits

LCO 3.1.5 Each safety rod shall be fully withdrawn.

APPLICABILITY: MODES 1 and 2.

-----NOTE-----
This LCO is not applicable while performing SR 3.1.4.2.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>A. One safety rod not fully withdrawn.</p>	<p>A.1 / Withdraw the rod fully. /</p>	<p>1 hour /</p>
	<p>OR</p> <p>A.2.1 Verify SDM is $\geq 1\% \Delta k/k$.</p> <p>A.1.1</p> <p>← OR</p>	<p>1 hour</p>
	<p>A.2.2 Initiate boration to restore SDM to within limit.</p> <p>A.1.2</p> <p>← AND</p>	<p>1 hour</p>
	<p>A.2.2 Declare the rod inoperable.</p>	<p>1 hour</p>

(continued)

BASES (continued)

LCO The safety groups must be fully withdrawn any time the reactor is critical or approaching criticality. This ensures that a sufficient amount of negative reactivity is available to shut down the reactor and maintain the required SDM following a reactor trip.

APPLICABILITY The safety groups must be within their insertion limits with the reactor in MODES 1 and 2. This ensures that a sufficient amount of negative reactivity is available to shut down the reactor and maintain the required SDM following a reactor trip. Refer to LCO 3.1.1 for SDM requirements in MODES 3, 4, and 5. LCO 3.9.1, "Boron Concentration," ensures adequate SDM in MODE 6.

This LCO has been modified by a Note indicating the LCO requirement is suspended during SR 3.1.4.2. This SR verifies the freedom of the rods to move, and requires the safety group to move below the LCO limits, which would normally violate the LCO.

ACTIONS

A.1.1, A.1.2 and A.2.3

~~A.1, A.1.1, A.2.1, 2, and A.2.2~~

When one safety rod is not fully withdrawn, 1 hour is allowed to fully withdraw the rod. This is necessary because the available SDM may be reduced with one of the safety rods not within insertion limits.

Alternatively, the ~~rod~~ ^{safety} must be declared inoperable within ~~the~~ ^a 1 hour time frame. This requires entry into LCO 3.1.4, "CONTROL ROD Group Alignment Limits." In addition, since the rod may be inserted farther than the group average insertion for a long time, SDM must be evaluated. Ensuring the SDM meets the minimum requirement within 1 hour is adequate to determine that further degradation of the SDM is not occurring.

Restoration of the required SDM requires increasing the boron concentration, since the ~~CONTROL ROD~~ ^{safety rod} may remain misaligned and not be providing its normal negative reactivity on tripping. RCS boration must occur as described in Bases Section 3.1.1. The required Completion Time of 1 hour for initiating boration is reasonable, based

(continued)

BASES

ACTIONS

A.1.1, A.1.2 and A.2.3.

A.1, A.2.1.1, A.2.1.2, and A.2.2. (continued)

on the time required for potential xenon redistribution, the low probability of an accident occurring, and the steps required to complete the action. This allows the operator sufficient time for aligning the required valves and starting the boric acid pumps. Boration will continue until the required SDM is restored.

The allowed Completion Time of 1 hour provides an acceptable time for evaluating and repairing minor problems without allowing the plant to remain in an unacceptable condition for an extended period of time.

B.1.1 and B.1.2

When more than one safety rod is inoperable, there is a possibility that the required SDM may be adversely affected. Under these conditions, it is important to determine the SDM, and if it is less than the required value, initiate boration until the required SDM is recovered. The Completion Time of 1 hour is adequate for determining SDM and, if necessary, for initiating emergency boration to restore SDM.

In this situation, SDM verification must include the worth of the untrippable rod as well as the rod of maximum worth.

B.2

If more than one safety rod is inoperable the unit must be brought to a MODE where the LCO is not applicable. The allowed Completion Time of 6 hours is reasonable, based on operating experience, for reaching the required MODE from full power conditions in an orderly manner and without challenging plant systems.

SURVEILLANCE
REQUIREMENTS

SR 3.1.5.1

Verification that each safety rod is fully withdrawn ensures the rods are available to provide reactor shutdown capability.

(continued)