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**Industry/TSTF Standard Technical Specification Change Traveler**

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**Move Applicability Note to LCO to avoid confusion in the application of SR 3.0.4 for MODE changes**

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**Priority/Classification** 1) Correct Specifications

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

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**Description:**

The Note in the Applicability of NUREG Specification 3.1.5 and 3.2.1 is moved to the LCO. Changed wording of 3.1.5 Note to clarify that it only provides exception to those safety rods which are inserted during the performance of SR 3.1.4.2. Changed wording of 3.2.1 Note to clarify that this exception is only applicable to those regulating rods which are outside the limits of the COLR solely due to testing in accordance with SR 3.1.4.2.

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**Justification:**

The Note was moved to the LCO section to be consistent with the Writer's Guide and to avoid confusion in the application of SR 3.0.4 for MODE changes. As presented in the NUREG, entry into or exit from the Applicability Note could have been interpreted to constitute a MODE change. This revision results in no change to the intended application of NUREG LCOs 3.1.5, and 3.2.1. In addition, as written, the 3.1.5 Note provided an exception to the Applicability for all safety rods while performing SR 3.1.4.2. This exception was applicable to all safety rods, even if they were inserted for reasons other than the performance of SR 3.1.4.2. The change clearly provides this exception only to those safety rods which are inserted during the performance of SR 3.1.4.2. Also, as written, the 3.2.1 Note provided an exception to the Applicability for all regulating rods while performing SR 3.1.4.2. This exception is applicable to all regulating rods, even if they failed to meet the requirements of the LCO for reasons other than the performance of SR 3.1.4.2. The change in the wording of the Note clarifies that this exception is only applicable to those regulating rods which are outside the limits of the COLR solely due to testing in accordance with SR 3.1.4.2.

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**Revision History****OG Revision 0****Revision Status: Active****Next Action:**

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Revision Proposed by: Oconee

Revision Description:

Original Issue

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**Owners Group Review Information**

Date Originated by OG: 06-Nov-97

Owners Group Comments

ONS-013

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

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4/22/98

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**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. Modify of the LCO Note for 3.1.5 and 3.2.1 and the Bases to read ".. to perform" from during performance of
2. Notes are being moved to be consistent with Writers Guide
3. Issue of all NUREGs LCOs having the Note in the appropriate place for these types of LCOs that are excepted was discussed - consideration of all OGs looking through their respective NUREGs to identify these LCOs that need to be revised
4. Only 3.1.5 and 3.2.1 will go forward in TSTF; the other affected sections will not be sent forward now
5. BWOG only

TSTF Resolution: Approved Date: 05-Feb-98

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**NRC Review Information**

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

**NRC Comments:**

(No Comments)

Final Resolution: NRC Approves

Final Resolution Date: 07-Apr-98

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**Incorporation Into the NUREGs**

File to BBS/LAN Date:

TSTF Informed Date:

TSTF Approved Date:

NUREG Rev Incorporated:

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**Affected Technical Specifications**

LCO 3.1.5	Safety Rod Insertion Limits
LCO 3.1.5 Bases	Safety Rod Insertion Limits
Appl. 3.1.5	Safety Rod Insertion Limits
Appl. 3.1.5 Bases	Safety Rod Insertion Limits
LCO 3.2.1	Regulating Rod Insertion Limits
LCO 3.2.1 Bases	Regulating Rod Insertion Limits
Appl. 3.2.1	Regulating Rod Insertion Limits
Appl. 3.2.1 Bases	Regulating Rod Insertion Limits

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### 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.~~

*Not required for any safety rod inserted to perform*

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One safety rod not fully withdrawn.	A.1 Withdraw the rod fully.	1 hour
	<u>OR</u>	
	A.2.1.1 Verify SDM is $\geq 1\% \Delta k/k$ .	1 hour
	<u>OR</u>	
	A.2.1.2 Initiate boration to restore SDM to within limit.	1 hour
	<u>AND</u>	
	A.2.2 Declare the rod inoperable.	1 hour

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### 3.2 POWER DISTRIBUTION LIMITS

#### 3.2.1 Regulating Rod Insertion Limits

LCO 3.2.1 Regulating rod groups shall be within the physical insertion, sequence, and overlap limits specified in the COLR.

APPLICABILITY: MODES 1 and 2.

**NOTE**

~~This LCO is not applicable while performing SR 3.1.4.2.~~

Not required for any regulating rod repositioned to perform

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Regulating rod groups inserted in restricted operational region, or sequence or overlap, or any combination, not met.	A.1 Perform SR 3.2.5.1.	Once per 2 hours
	<u>AND</u> A.2 Restore regulating rod groups to within limits.	24 hours from discovery of failure to meet the LCO
B. Required Action and associated Completion Time of Condition A not met.	B.1 Reduce THERMAL POWER to less than or equal to THERMAL POWER allowed by regulating rod group insertion limits.	2 hours

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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.

*for those safety rods which are inserted solely due to testing in accordance with*

ACTIONS

A.1, A.2.1.1, 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 may be declared inoperable within the same 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 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

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BASES

LCO  
(continued)

The overlap between regulating groups provides more uniform rates of reactivity insertion and withdrawal and is imposed to maintain acceptable power peaking during regulating rod motion.

Error adjusted maximum allowable setpoints for regulating rod insertion are provided in the COLR. The setpoints are derived by an adjustment of the measurement system independent limits to allow for THERMAL POWER level uncertainty and rod position errors.

Actual alarm setpoints implemented in the unit may be more restrictive than the maximum allowable setpoint values to provide additional conservatism between the actual alarm setpoint and the measurement system independent limit.

APPLICABILITY

The regulating rod sequence, overlap, and physical insertion limits shall be maintained with the reactor in MODES 1 and 2. These limits maintain the validity of the assumed power distribution, ejected rod worth, SDM, and reactivity rate insertion assumptions used in the safety analyses. Applicability in MODES 3, 4, and 5 is not required, because neither the power distribution nor ejected rod worth assumptions are exceeded in these MODES. SDM in MODES 3, 4, and 5 is governed by LCO 3.1.1, "SHUTDOWN MARGIN (SDM)."

for those regulating rods not within the limits of the COLR solely due to testing in accordance with

LCO 3.1.1 has been modified by a Note that suspends the LCO requirement during the performance of SR 3.1.4.2, which may verifies the freedom of the rods to move. This SR requires the regulating rods to move below the LCO limit, which normally violates the LCO. would otherwise

ACTIONS

The regulating rod insertion alarm setpoints provided in the COLR are based on both the initial conditions assumed in the accident analyses and on the SDM. Specifically, separate insertion limits are specified to determine whether the unit is operating in violation of the initial conditions (e.g., the range of power distributions) assumed in the accident analyses or whether the unit is in violation of the SDM or ejected rod worth limits. Separate insertion limits are provided because different Required Actions and Completion Times apply, depending on which insertion limit has been

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