

## Industry/TSTF Standard Technical Specification Change Traveler

Add "bypass removal" features to the RPS Instrumentation - Shutdown LCO

Priority/Classification 1) Correct Specifications

NUREGs Affected:  1430  1431  1432  1433  1434

Description:

Add "bypass removal" features to the RPS Instrumentation - Shutdown LCO.

Justification:

The bypass removal channels are applicable to the Shutdown RPS Instrumentation LCO, but are excluded. They are explicitly included in the RPS Instrumentation - Operating LCO. Including them in this Specification is necessary to address all the features of the Power Rate of Change - High RPS trip. This change corrects the error. This change is also consistent with the CEOG Digital LCO.

### Revision History

**OG Revision 0**

**Revision Status: Active**

**Next Action:**

Revision Proposed by: Calvert Cliffs

Revision Description:  
Original Issue

#### Owners Group Review Information

Date Originated by OG: 24-Oct-96

Owners Group Comments  
(No Comments)

Owners Group Resolution: Approved Date: 24-Oct-96

#### TSTF Review Information

TSTF Received Date: 04-Nov-96 Date Distributed for Review 20-Jan-97

OG Review Completed:  BWOG  WOG  CEOG  BWROG

TSTF Comments:

WOG - Not applicable, accepts

BWOG - Not applicable, accepts

BWROG - Not applicable, accepts

TSTF Resolution: Approved Date: 06-Mar-97

#### NRC Review Information

NRC Received Date: 27-Mar-97 NRC Reviewer: SCHULTEN,

NRC Comments:

4/7/97 Rec'd pkg.

4/10/97 Forwarded to reviewer.

Final Resolution: NRC Approves

Final Resolution Date: 06-Oct-97

### Incorporation Into the NUREGs

4/2/98

---

File to BBS/LAN Date:

TSTF Informed Date:

TSTF Approved Date:

NUREG Rev Incorporated:

---

**Affected Technical Specifications**

---

LCO 3.3.2            RPS Instrumentation - Shutdown (Analog)

---

LCO 3.3.2 Bases        RPS Instrumentation - Shutdown (Analog)

---

---

4/2/98

3.3 INSTRUMENTATION

3.3.2 Reactor Protective System (RPS) Instrumentation - Shutdown (Analog)

LCO 3.3.2 Four Power Rate of Change - High RPS trip units and associated instrument channels shall be OPERABLE, with an Allowable Value of  $\leq [2.6]$  dpm.

*and bypass removal*

APPLICABILITY: MODES 3, 4, and 5, with any reactor trip circuit breakers (RTCBs) closed and any control element assembly capable of being withdrawn.

-----NOTE-----  
 Trip may be bypassed when THERMAL POWER is  $< [1E-4]\%$  RTP.  
 Bypass shall be automatically removed when THERMAL POWER is  $\geq [1E-4]\%$  RTP.  
 -----

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One Power Rate of Change - High trip unit or associated instrument channel inoperable.	A.1 Place affected trip unit in bypass or trip.	1 hour
	<u>AND</u>	
	A.2.1 Restore channel to OPERABLE status.	[48] hours
	<u>OR</u>	
	A.2.2 Place affected trip unit in trip.	48 hours

(continued)

TSTF-180

BASES

---

APPLICABLE  
SAFETY ANALYSES  
(continued)

accident analysis were qualitatively credited in the safety analysis and the NRC staff approved licensing basis for the plant. These Functions may provide protection for conditions that do not require dynamic transient analysis to demonstrate Function performance. Other Functions, such as the Loss of Load trip, are purely equipment protective, and their use minimizes the potential for equipment damage.

The Power Rate of Change—High trip is used to trip the reactor when excore wide range power indicates an excessive rate of change.

The Power Rate of Change—High trip is not required for protection. It serves as a backup to the administratively enforced startup rate limit.

The Power Rate of Change—High Function minimizes transients for events such as a continuous CEA withdrawal or a boron dilution event from low power levels. The Power Rate of Change—High trip is automatically bypassed at  $< 1E-4\%$  RTP, as sensed by the wide range nuclear instrument (NI) Level 2 bistable, when poor counting statistics may lead to erroneous indication. It is also bypassed at  $> 12\%$  RTP, where moderator temperature coefficient and fuel temperature coefficient make high rate of change of power unlikely. This bypass is effected by the power range NI Level 1 bistable. Automatic bypass removal is also effected by these bistables. With the RTCBs open, the Power Rate of Change—High trip is not required to be OPERABLE; however, the indication and alarm Functions of at least two channels are required to be OPERABLE. LCO 3.3.13 ensures the wide range channels are available to detect and alert the operator to a boron dilution event.

The RPS instrumentation satisfies Criterion 3 of the NRC Policy Statement.

---

LCO

The LCO requires all instrumentation performing an RPS Function to be OPERABLE. Failure of any required portion of the instrument channel renders the affected channel(s) inoperable and reduces the reliability of the affected Functions.

*), or bypass removal channel,*

(continued)

---