

## Industry/TSTF Standard Technical Specification Change Traveler

### Change 3.3.1 Applicability for Nuclear Overpower High Setpoint and RCS High Pressure functions

Priority/Classification 2) Consistency/Standardization

NUREGs Affected:  1430  1431  1432  1433  1434

**Description:**

In Table 3.3.1-1-the Applicable MODES for Nuclear Overpower High Setpoint function and RCS High Pressure function are expanded to include MODE 3 when not in shutdown bypass operation with any CRD trip breaker in the closed position and the CRD System capable of rod withdrawal. Note (d) is added to ITS Table 3.3.1-1. The Applicable MODES for the RCS High Pressure function is modified to apply only in MODE 2 when not in shutdown bypass operation.

**Justification:**

This additional Applicability in MODE 3 is appropriate to ensure that the instrumentation required to initiate the insertion of any withdrawn CONTROL RODS is OPERABLE whenever CONTROL RODS are withdrawn or capable of withdrawal. The automatic insertion of any withdrawn CONTROL ROD is consistent with evaluations of accidents initiated from MODE 3. In addition, the applicable MODE for the RCS High Pressure function to apply is MODE 2 when not in shutdown bypass operation. This is appropriate since the Shutdown Bypass RCS High Pressure function is required to be OPERABLE in MODE 2 during shutdown bypass operation with any CRD trip breakers in the closed position and the CRD System capable of rod withdrawal.

### Revision History

**OG Revision 0**

**Revision Status: Active**

**Next Action: NRC**

Revision Proposed by: Oconec

Revision Description:  
Original Issue

#### Owners Group Review Information

Date Originated by OG: 06-Nov-97

Owners Group Comments  
ONS-020

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

#### 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:**

Change Note b and d to delete the "s" on breaker. 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:

2/19/98

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**Affected Technical Specifications**

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S/A 3.3.1 Bases            RPS Instrumentation

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LCO 3.3.1                RPS Instrumentation

Change Description:    Table 3.3.1-1

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Table 3.3.1-1 (page 1 of 1)  
Reactor Protection System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Nuclear Overpower -				
a. High Setpoint	1,2(a), 3(d)	D	SR 3.3.1.1 SR 3.3.1.2 SR 3.3.1.5 SR 3.3.1.7	≤ [104.9]% RTP
b. Low Setpoint	2(b), 3(b) 4(b), 5(b)	E	SR 3.3.1.1 SR 3.3.1.5 SR 3.3.1.7	≤ 5% RTP
2. RCS High Outlet Temperature	1,2	D	SR 3.3.1.1 SR 3.3.1.4 SR 3.3.1.6	≤ [618]°F
3. RCS High Pressure	1,2 (a), 3(d)	D	SR 3.3.1.1 SR 3.3.1.4 SR 3.3.1.6 SR 3.3.1.7	≤ [2355] psig
4. RCS Low Pressure	1,2(a)	D	SR 3.3.1.1 SR 3.3.1.4 SR 3.3.1.6 SR 3.3.1.7	≥ [1800] psig
5. RCS Variable Low Pressure	1,2(a)	D	SR 3.3.1.1 SR 3.3.1.4 SR 3.3.1.6	≥ $([11.59] \cdot T_{out} - [5037.8])$ psig
6. Reactor Building High Pressure	1,2,3(c)	D	SR 3.3.1.1 SR 3.3.1.4 SR 3.3.1.6	≤ [4] psig
7. Reactor Coolant Pump to Power	1,2(a)	D	SR 3.3.1.1 SR 3.3.1.4 SR 3.3.1.6 SR 3.3.1.7	[5]% RTP with ≤ 2 pumps operating
8. Nuclear Overpower RCS Flow and Measured AXIAL POWER IMBALANCE	1,2(a)	D	SR 3.3.1.1 SR 3.3.1.3 SR 3.3.1.5 SR 3.3.1.6 SR 3.3.1.7	Nuclear Overpower RCS Flow and AXIAL POWER IMBALANCE setpoint envelope in COLR
9. Main Turbine Trip (Control Oil Pressure)	≥ [45]% RTP	F	SR 3.3.1.1 SR 3.3.1.4 SR 3.3.1.6	≥ [45] psig
10. Loss of Main Feedwater Pumps (Control Oil Pressure)	≥ [15]% RTP	G	SR 3.3.1.1 SR 3.3.1.4 SR 3.3.1.6	≥ [55] psig
11. Shutdown Bypass RCS High Pressure	2(b), 3(b) 4(b), 5(b)	E	SR 3.3.1.1 SR 3.3.1.4 SR 3.3.1.6	≤ [1720] psig

(a) When not in shutdown bypass operation.

(b) During shutdown bypass operation with any CRD trip breaker in the closed position and the CRD System capable of rod withdrawal.

(c) With any CRD trip breaker in the closed position and the CRD System capable of rod withdrawal.

(d) With any CRD trip breaker in the closed position, the CRD system capable of rod withdrawal, and 3.3-5 not in shutdown bypass operation.

BASES

APPLICABLE  
SAFETY ANALYSES,  
LCO, and  
APPLICABILITY

11. Shutdown Bypass RCS High Pressure (continued)
- 1.a Nuclear Overpower-High Setpoint;
  2. RCS High Outlet Temperature;
  3. RCS High Pressure;
  4. RCS Low Pressure;
  5. RCS Variable Low Pressure;
  6. Reactor Building High Pressure;
  7. Reactor Coolant Pump to Power; and
  8. Nuclear Overpower RCS Flow and Measured AXIAL POWER IMBALANCE.

Functions 1, 4, 5, 7, and 8 just listed may be bypassed in MODE 2 when RCS pressure is below [1720] psig, provided the Shutdown Bypass RCS High Pressure and the Nuclear Overpower-Low setpoint trip are placed in operation. Under these conditions, the Shutdown Bypass RCS High Pressure trip and the Nuclear Overpower-Low setpoint trip act to prevent unit conditions from reaching a point where actuation of these Functions is necessary.

JWSERT  
B3.3-2/A

Two other Functions are required to be OPERABLE during portions of MODE 1. These are the Main Turbine Trip (Control Oil Pressure) and the Loss of Main Feedwater Pumps (Control Oil Pressure) trip. These Functions are required to be OPERABLE above [45]% RTP and [15]% RTP, respectively. Analyses presented in BAW-1893 (Ref. 6) have shown that for operation below these power levels, these trips are not necessary to minimize challenges to the PORVs as required by NUREG-0737 (Ref. 5).

Because the only safety function of the RPS is to trip the CONTROL RODS, the RPS is not required to be OPERABLE in MODE 3, 4, or 5 if the reactor trip breakers are open, or the CRD System is incapable of rod withdrawal. Similarly, the RPS is not required to be OPERABLE in MODE 6 when the CONTROL RODS are decoupled from the CRDs.

(continued)

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In MODE 3 when not operating in shutdown bypass but with any CRD trip breaker in the closed position and the CRD system capable of rod withdrawal, the Nuclear Overpower-High Setpoint trip and the RCS High Pressure trip are required to be OPERABLE.