

TECHNICAL SPECIFICATION CHANGE REQUEST NO. 53, REVISION 1

Replace pages 3/4 3-2, 3/4 3-3, 3/4 3-8, and 3/4 10-2 of Appendix A with the attached corresponding revised pages.

PROPOSED CHANGES

- 1) On page 3/4 3-2: Add note reference (c) to Item 4 under APPLICABLE MODES.
- 2) On page 3/4 3-3: Add note (c) which reads, "See Special Test Exception 3.10.2."
- 3) On page 3/4 3-8: To item 2, add the sentence, "Adjust channel if absolute difference is greater than or equal to 2 percent."
- 4) On page 3/4 3-8: Revise item 3 to read, "Compare incore to out-of-core measured AXIAL POWER IMBALANCE above 30% RATED THERMAL POWER. Recalibrate if absolute difference is greater than or equal to 3.5 percent."
- 5) On page 3/4 10-2: Revise Technical Specification 3.10.2 to read, "The limitations of Specifications 3.1.1.3, 3.1.3.1, 3.1.3.2, 3.1.3.5, 3.1.3.6, 3.1.3.7 and 3.3.1.1 (Item 4) may be suspended during the performance of PHYSICS TEST provided:"

REASON FOR PROPOSED CHANGES

The existing surveillance procedure for verifying Nuclear Instrumentation (NI) calibration against heat balance is excessively restrictive. It requires calibration of the NI channel if the absolute difference between heat balance and NI output is greater than or equal to 2%. The time period presently allowed to complete the calibration is 1 hour; then plant shutdown must begin. This change allows the channel to be adjusted to agree with heat balance, rather than be recalibrated, if the absolute difference is greater than or equal to 2%. Surveillance procedures may be more restrictive than the 2% limit allowed by Technical Specifications in order to maintain economic benefits associated with a more precise NI adjustment.

SAFETY ANALYSIS OF PROPOSED CHANGE

Adjustment of an NI channel will compensate for core variation thereby assuring accurate indication and trip functions. Required periodic calibration of the channel will maintain its integrity. This change is consistent with the original accident analysis assumptions in the CR-3 Final Safety Analysis Report. This is not an unreviewed safety question, and the health and safety of the plant personnel and the public are not affected.

TABLE 3.3-1

REACTOR PROTECTION SYSTEM INSTRUMENTATION

	<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
1.	Manual Reactor Trip	1	1	1	1, 2 and *	8
2.	Nuclear Overpower	4	2	3	1, 2	2#
3.	RCS Outlet Temperature--High	4	2	3	1,2	3#
4.	Nuclear Overpower Based on RCS Flow and AXIAL POWER IMBALANCE	4	2(a)	3	1, 2(c)	2#
5.	RCS Pressure--Low	4	2(a)	3	1, 2	3#
6.	RCS Pressure--High	4	2	3	1, 2	3#
7.	Variable Low RCS Pressure	4	2(a)	3	1, 2	3#
8.	Reactor Containment Pressure--High	4	2	3	1, 2	3#
9.	Intermediate Range, Neutron Flux and Rate	2	0	2	1, 2 and *	4
10.	Source Range, Neutron Flux and Rate					
	A. Startup	2	0	2	2## and *	5
	B. Shutdown	2	0	1	3, 4 and 5	6
11.	Control Rod Drive Trip Breakers	2 per trip system	1 per trip system	2 per trip system	1, 2 and *	7#
12.	Reactor Trip Module	2 per trip system	1 per trip system	2 per trip system	1, 2 and *	7#
13.	Shutdown Bypass RCS Pressure--High	4	2	3	2**, 3** 4**, 5**	6#
14.	Reactor Coolant Pump Power Monitors	2 per pump	1 from 2 or more pumps (a,b)	2 per pump	1, 2	25

TABLE 3.3-1 (Continued)

TABLE NOTATION

- * With the control rod drive trip breakers in the closed position and the control rod drive system capable of rod withdrawal.
- ** When Shutdown Bypass is actuated.
- # The provisions of Specification 3.0.4 are not applicable.
- ## High voltage to detector may be de-energized above 10⁻¹⁰ amps on both Intermediate Range channels.
- (a) Trip may be manually bypassed when RCS pressure 1720 psig by actuating Shutdown Bypass provided that:
 - (1) The Nuclear Overpower Trip Setpoint is 5% of RATED THERMAL POWER,
 - (2) The Shutdown Bypass RCS Pressure--High Trip Setpoint of 1720 psig is imposed, and
 - (3) The Shutdown Bypass is removed when RCS pressure 1800 psig.
- (b) Trip may be manually bypassed when reactor power is less than or equal to 2475 MWt and 4 reactor coolant pumps are operating.
- (c) See Special Test Exception 3.10.2.

ACTION STATEMENTS

- ACTION 1** - With the number of channels OPERABLE one less than required by the Minimum Channels OPERABLE requirement, restore the inoperable channel to OPERABLE status within 48 hours or be in at least HOT STANDBY within the next 6 hours and/or open the control rod drive trip breakers.
- ACTION 2** - With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed provided all of the following conditions are satisfied:
 - a. The inoperable channel is placed in the tripped condition within one hour.
 - b. The Minimum Channels OPERABLE requirement is met; however, one additional channel may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.1.1.

TABLE 4.3-1 (Continued)

NOTATION

- * - With any control rod drive trip breaker closed.
- ** - When Shutdown Bypass is actuated.
- (1) - If not performed in previous 7 days.
- (2) - Heat balance only, above 15% of RATED THERMAL POWER. Adjust channel if absolute difference is greater than or equal to 2 percent.
- (3) - Compare incore to out-of-core measured AXIAL POWER IMBALANCE above 30% of RATED THERMAL POWER. Recalibrate if absolute difference is greater than or equal to 3.5 percent.
- (4) - AXIAL POWER IMBALANCE and loop flow indications only.
- (5) - Verify at least one decade overlap if not verified in previous 7 days.
- (6) - Each train tested every other month.
- (7) - Neutron detectors may be excluded from CHANNEL CALIBRATION.
- (8) - Flow rate measurement sensors may be excluded from CHANNEL CALIBRATION. However, each flow measurement sensor shall be calibrated at least once per 18 months.

SPECIAL TEST EXCEPTIONS

PHYSICS TESTS

LIMITING CONDITION FOR OPERATION

- 3.10.2 The limitations of Specifications 3.1.1.3, 3.1.3.1, 3.1.3.2, 3.1.3.5, 3.1.3.6, 3.1.3.7, and 3.3.1.1 (Item 4) may be suspended during the performance of PHYSICS TESTS provided:
- The THERMAL POWER does not exceed 5% of RATED THERMAL POWER, and
 - The reactor trip setpoints on the OPERABLE Nuclear Overpower Channels are set at \leq 25% of RATED THERMAL POWER.
 - The nuclear instrumentation Source Range and Intermediate Range high startup rate control rod withdrawal inhibit are OPERABLE.

APPLICABILITY: MODE 2.

ACTION:

With the THERMAL POWER $>$ 5% of RATED THERMAL POWER, immediately open the control rod drive trip breakers.

SURVEILLANCE REQUIREMENTS

- 4.10.2.1 The THERMAL POWER shall be determined to be \leq 5% of RATED THERMAL POWER at least once per hour during PHYSICS TESTS.
- 4.10.2.2 Each Source and Intermediate Range and Nuclear Overpower Channel shall be subjected to a CHANNEL FUNCTIONAL TEST within 12 hours prior to initiating PHYSICS TESTS.