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Amendment No.

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LIMITING CONDITION FOR OPERATIONS

SURVEILLANCE REQUIREMENT

3.3.C Scram Insertion Time

- 2. The average of the scram insertion times for the three fastest control rods of all groups of four control rods in a two by two array shall be no greater than:

<u>% Inserted From Fully Withdrawn</u>	<u>Avg. Scram Insertion Time Sec.</u>
10	.58
30	1.35
50	2.12
90	5.30

- 3. The maximum scram insertion time for 90% insertion of any operable control rod shall not exceed 7.00 seconds.

D. Control Rod Accumulators

At all reactors operating pressures, a rod accumulator may be inoperable provided that no other control rod in the nine-rod square array around this rod has a:

- 1. Inoperable accumulator.
- 2. Directional control valve electrically disarmed while in a non-fully inserted position.
- 3. Scram insertion time greater than the maximum permissible insertion time.

If a control rod with an inoperable accumulator is inserted "full-in" and its directional control valves are electrically disarmed, it shall not be considered to have an inoperable accumulator.

4.3.C Scram Insertion Time

- 2. At 16 week intervals, 50% of the control rod drives shall be tested as in 4.3.C.1 so that every 32 weeks all of the control rods shall have been tested. Whenever 50% of the control rod drives have been scram tested, an evaluation shall be made to provide reasonable assurance that proper control rod drive performance is being maintained.

D. Control Rod Accumulators

Once a shift, check the status of the pressure and level alarms for each accumulator.

E. Reactivity Anomalies

The reactivity equivalent of the difference between the actual critical rod configuration and the expected configuration during power operation shall not exceed 1% ΔK . If this limit is exceeded, the reactor will be shut down until the cause has been determined and corrective actions have been taken if such actions are appropriate.

- F. If Specifications 3.3.A through D above cannot be met, an orderly shutdown shall be initiated and the reactor shall be in the Cold Shutdown condition within 24 hours. Specifications 3.3.A through D above do not apply when there is no fuel in the reactor vessel.

G. Scram Discharge Volume

1. The scram discharge volume drain & vent valves shall be operable whenever more than one operable control rod is withdrawn.
2. If any of the scram discharge volume drain or vent valves are made or found inoperable an orderly shutdown shall be initiated and the reactor shall be in Cold Shutdown within 24 hours.

E. Reactivity Anomalies

During the startup test program and startups following refueling outages, the critical rod configurations will be compared to the expected configurations at selected operating conditions. These comparisons will be used as base data for reactivity monitoring during subsequent power operation throughout the fuel cycle. At specific power operating conditions, the critical rod configuration will be compared to the configuration expected based upon appropriately corrected past data. This comparison will be made at least every full power month.

G. Scram Discharge Volume

1. The scram discharge volume drain and vent valves shall be verified open at least once per month. Each valve shall be cycled quarterly. These valves may be closed intermittently for testing under administrative control.
2. During each refueling outage verify the scram discharge volume drain and vent valves;
 - a) Close within 30 seconds after receipt of a reactor scram signal and
 - b) Open when the scram is reset.

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TABLE 3.2.C
INSTRUMENTATION THAT INITIATES ROD BLOCKS

<u>Minimum # of Operable Instrument Channels Per Trip Systems (1)</u>	<u>Instrument</u>	<u>Trip Level Setting</u>
2	APRM Upscale (Flow Biased)	$(0.65W + 42) \left[\frac{FRP}{MFLPD} \right] (2)$
2	APRM Downscale	2.5 indicated on scale
1 (7)	Rod Block Monitor (Flow Biased)	$(0.65W + 42) \left[\frac{FRP}{MFLPD} \right] (2)$
1 (7)	Rod Block Monitor Downscale	5/125 of full scale
3	IRM Downscale (3)	5/125 of full scale
3	IRM Detector not in Startup Position	(8)
3	IRM Upscale	$\leq 108/125$ of full scale
2 (5)	SRM Detector not in Startup Position	(4)
2 (5) (6)	SRM Upscale	$\leq 10^5$ counts/sec.
1.(9)	Scram Discharge Volume Water Level-High	≤ 18 gallons

NOTES FOR TABLE 3.2.C

1. For the startup and run positions of the Reactor Mode Selector Switch, there shall be two operable or tripped trip systems for each function. The SRM and IRM blocks need not be operable in "Run" mode, and the APRM and REM rod blocks need not be operable in "Startup" mode. If the first column cannot be met for one of the two trip systems, this condition may exist for up to seven days provided that during that time the operable system is functionally tested immediately and daily thereafter; if this condition lasts longer than seven days, the system shall be tripped. If the first column cannot be met for both trip systems, the systems shall be tripped.
2. W is percent of drive flow required to produce a rated core flow of 69 M lb/hr. Trip level setting is in percent of design power (1998 MWt).
3. IRM downscale is bypassed when it is on its lowest range.
4. This function is bypassed when the count rate is ≥ 100 cps.
5. One of the four SRM inputs may be bypassed.
6. This SRM function is bypassed when the IRM range switches are on range 8 or above.
7. The trip is bypassed when the reactor power is $\leq 30\%$.
8. This function is bypassed when the mode switch is placed in Run.
9. If the number of operable channels is less than required by the minimum number of operable instrument channels per trip system requirement, place the inoperable channel in the tripped condition within one hour.

PNPS
TABLE 4.2.C
MINIMUM TEST AND CALIBRATION FREQUENCY FOR CONTROL ROD BLOCKS ACTUATION

<u>Instrument Channel</u>	<u>Instrument Functional</u>	<u>Calibration</u>	<u>Instrument Check</u>
	<u>Test</u>		
1) APRM - Downscale	(1) (3)	Once/2 months	Once/day
2) APRM - Upscale	(1) (3)	Once/3 months	Once/day
3) IRM - Upscale	(2) (3)	Startup or Control Shutdown	(2)
4) IRM - Downscale	(2) (3)	Startup or Control Shutdown	(2)
5) RBM - Upscale	(1) (3)	Once/6 months	Once/day
6) RBM - Downscale	(1) (3)	Once/6 months	Once/day
7) SRM - Upscale	(2) (3)	Startup or Control Shutdown	(2)
8) SRM - Detector Not in Startup Position	(2) (3)	Startup or Control Shutdown	(2)
9) IRM - Detector Not in Startup Position	(2) (3)	Startup or Control Shutdown	(2)
10) Scram Discharge Volume Water Level-High	Once/3 Months	Refuel	N/A
<u>Logic System Functional Test (4) (6)</u>			
(1) System Logic Check		Once/6 Months	