3.3 INSTRUMENTATION

3.3.3 Post Accident Monitoring (PAM) Instrumentation

LCO 3.3.3 The PAM instrumentation for each Function in Table 3.3.3-1 shall be OPERABLE.

APPLICABILITY: MODES 1, 2 and 3.

ACTIONS

---NOTES---

1. LCO 3.0.4 is not applicable.
2. Separate Condition entry is allowed for each Function.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more Functions with one required channel inoperable.	A.1 Restore required channel to OPERABLE status.	30 days
B. Required Action and associated Completion Time of Condition A not met.	B.1 Initiate action in accordance with Specification 5.6.8.	Immediately
C. One or more Functions with two or more required channels inoperable.	C.1 Restore all but one channel to OPERABLE status.	7 days

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION		COMPLETION TIME
D. Required Action and associated Completion Time of Condition C not met.	D.1	Enter the Condition referenced in Table 3.3.3-1 for the channel.	Immediately
E. As required by Required Action D.1 and referenced in Table 3.3.3-1.	E.1	Be in MODE 3.	6 hours
	AND		
	E.2	Be in MODE 4.	12 hours
F. As required by Required Action D.1 and referenced in Table 3.3.3-1.	F.1	Initiate action in accordance with Specification 5.6.8.	Immediately

SURVEILLANCE REQUIREMENTS

----------NOTE----------

SR 3.3.3.1 and SR 3.3.3.2 apply to each PAM instrumentation Function in Table 3.3.3-1.

	SURVEILLANCE	FREQUENCY
SR 3.3.3.1	Perform CHANNEL CHECK for each required instrumentation channel that is normally energized.	31 days
SR 3.3.3.2	----------NOTE---------- Neutron detectors are excluded from CHANNEL CALIBRATION. --- Perform CHANNEL CALIBRATION.	24 months

Table 3.3.3-1 (page 1 of 1)
Post Accident Monitoring Instrumentation

FUNCTION	REQUIRED CHANNELS	CONDITION REFERENCED FROM REQUIRED ACTION D.1
1. Neutron Flux (Wide Range NIS)	2	E
2. Steam Line Pressure	2 per steam generator	E
3. Reactor Coolant System (RCS) Hot Leg Temperature - T_{hot} (Wide Range)	2	E
4. RCS Cold Leg Temperature -T_{cold} (Wide Range)	2	E
5. RCS Pressure (Wide Range)	2	E
6. Reactor Vessel Water Level Indication System	2	F
7. a) Containment Recirculation Sump Water Level (Narrow Range)	2	E
b) Containment Reactor Cavity Sump Level-Wide Range	2	E
8. a) Containment Pressure (Wide Range)	2	E
b) Containment Pressure (Normal Range)	2	E
9. Containment Isolation Valve Position	2 per penetration flow path [(a) (b)]	E
10. Containment Area Radiation (High Range)	2	F
11. Not used		
12. Pressurizer Level	2	E
13. a) Steam Generator Water Level (Wide Range)	4	E
b) Steam Generator Water Level (Narrow Range)	2 per steam generator	E
14. Condensate Storage Tank Level	2	E
15. Incore Thermocouples - Quadrant 1	2 [(c)]	E
16. Incore Thermocouples - Quadrant 2	2 [(c)]	E
17. Incore Thermocouples - Quadrant 3	2 [(c)]	E
18. Incore Thermocouples - Quadrant 4	2 [(c)]	E
19. Auxiliary Feedwater Flow	4	E
20. Refueling Water Storage Tank Water Level	2	E

(a) Not required for isolation valves whose associated penetration is isolated by at least one closed and deactivated automatic valve, closed manual valve, blind flange, or check valve with flow through the valve secured.
(b) Only one position indication channel is required for penetration flow paths with only one installed control room indication channel.
(c) A channel consists of two Incore thermocouples.

3.6 CONTAINMENT SYSTEMS

3.6.8 Deleted

THIS PAGE NOT USED

THIS PAGE NOT USED

5.6 Reporting Requirements

5.6.6 Reactor Coolant System (RCS) PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR) (continued)

b. The analytical methods used to determine the RCS pressure and temperature limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

1. NRC Letter from NRC to Gregory M. Rueger dated May 28, 1999

2. The analytical methods used to determine the RCS pressure and temperature limits were developed in accordance with:

10 CFR 50, Appendix G and H
Regulatory Guide 1.99, Revision 2
NUREG-0800, Standard Review Plan Section 5.3.2
Branch Technical Position MTEB 5-2
ASME B&PV Code Section III, Appendix G
ASME B&PV Code, Section XI, Appendix A
WCAP-14040-NP-A, Section 2.2

3. LTOP limits (Power Operated Relief Valves (PORV) pressure relief setpoint and LTOP enable temperature) were developed in accordance with:

NUREG-0800, Standard Review Plan Section 5.2.2
Branch Technical Position RSB 5-2
10 CFR 50, Appendix G and H
Regulatory Guide 1.99, Revision 2
Branch Technical Position MTEB 5-2
WCAP-14040-NP-A, Section 2.2

c. The PTLR shall be provided to the NRC upon issuance for each reactor vessel fluence period and for any revision or supplement thereto.

5.6.7 Not Used

5.6.8 PAM Report

When a report is required by Condition B or F of LCO 3.3.3, "Post Accident Monitoring (PAM) Instrumentation," a report shall be submitted within the following 14 days. The report shall outline the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status.

5.6.9 Not Used

(continued)