

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.
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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 5.6.6.	Immediately
C. One or more Functions with two required channels inoperable.	C.1 Restore 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. AND E.2 Be in MODE 4.	6 hours 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 5.6.6.	Immediately

SURVEILLANCE REQUIREMENTS

-----NOTE-----
 SR 3.3.3.1 applies to each PAM instrumentation Function in Table 3.3.3-1. SR 3.3.3.2 applies to each PAM instrumentation Function in Table 3.3.3-1, except Function 12. SR 3.3.3.3 applies to Function 12 only.

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----- CHANNEL CALIBRATION of Containment Area Radiation (High Range) detectors shall consist of verification of a response to a source. ----- Perform CHANNEL CALIBRATION.	18 months
SR 3.3.3.3	Perform TADOT.	18 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. Reactor Coolant System (RCS) Subcooling Monitor	2	E
2. RCS Hot Leg Temperature (Wide Range)	2 per loop	E
3. RCS Cold Leg Temperature (Wide Range)	2 per loop	E
4. RCS Pressure (Wide Range)	2	E
5. RCS Pressure (Narrow Range)	2	E
6. Reactor Vessel Water Level (Wide Range)	2	E
7. Reactor Vessel Water Level (Narrow Range)	2	E
8. Containment Sump B Water Level	2	E
9. Containment Pressure (Wide Range)	2	E
10. Containment Pressure (Intermediate Range)	2	E
11. Containment Pressure (Low Range)	2	E
12. Containment Isolation Valve Position	2 per penetration flow path (a)(b)	E
13. Containment Area Radiation (High Range)	2	F
14. Pressurizer Level	2	E
15. Steam Generator Water Level (Wide Range)	2 per steam generator	E
16. Steam Generator Water Level (Narrow Range)	2 per steam generator	E
17. Steam Generator Pressure	2 per steam generator	E
18. Condensate Storage Tank Level	2 per tank	E
19. Core Exit Temperature — Quadrant 1	2	E
20. Core Exit Temperature — Quadrant 2	2	E
21. Core Exit Temperature — Quadrant 3	2	E
22. Core Exit Temperature — Quadrant 4	2	E
23. Auxiliary Feedwater Flow	2	E
24. Refueling Water Storage Tank 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.

5.6 Reporting Requirements

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

- a. RCS pressure and temperature limits for heat up, cooldown, low temperature operation, criticality, hydrostatic testing, LTOP enabling, and PORV lift settings as well as heatup and cooldown rates shall be established and documented in the PTLR for the following:
 - (1) LCO 3.4.3, "RCS Pressure and Temperature (P/T) Limits"
 - (2) LCO 3.4.6, "RCS Loops-MODE 4"
 - (3) LCO 3.4.7, "RCS Loops-MODE 5, Loops Filled"
 - (4) LCO 3.4.10, "Pressurizer Safety Valves"
 - (5) LCO 3.4.12, "Low Temperature Overpressure Protection (LTOP)"
- 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 NRC Letters dated October 6, 2000 and July 23, 2001.
- c. The PTLR shall be provided to the NRC upon issuance for each reactor vessel fluence period and for any revision or supplement thereto.

5.6.6 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.

5.6.7 Tendon Surveillance Report

Abnormal conditions observed during testing will be evaluated to determine the effect of such conditions on containment structural integrity. This evaluation should be completed within 30 days of the identification of the condition. Any condition which is determined in this evaluation to have a significant adverse effect on containment structural integrity will be considered an abnormal degradation of the containment structure.

Any abnormal degradation of the containment structure identified during the engineering evaluation of abnormal conditions shall be reported to the