

3.3 INSTRUMENTATION

3.3.15 Post Accident Monitoring (PAM) Instrumentation

LCO 3.3.15 The PAM instrumentation for each Function in Table 3.3.15-1 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 to prepare and submit a Special Report. | Immediately |
| C. One or more Functions with two required channels inoperable. | C.1 Restore one channel to OPERABLE status. | 7 days |
| D. Required Action and associated Completion Time of Condition C not met. | D.1 Enter the Condition referenced in Table 3.3.15-1 for the channel. | Immediately |

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|---|---|-----------------|
| E. As required by Required Action D.1 and referenced in Table 3.3.15-1. | E.1 Be in MODE 3. | 6 hours |
| | <u>AND</u> | |
| | E.2 Be in MODE 4. | 12 hours |
| F. As required by Required Action D.1 and referenced in Table 3.3.15-1. | F.1 Initiate action to prepare and submit a Special Report. | Immediately |

SURVEILLANCE REQUIREMENTS

-----NOTE-----
 These SRs apply to each PAM instrumentation Function in Table 3.3.15-1.

| SURVEILLANCE | FREQUENCY |
|---|-----------|
| SR 3.3.15.1 Perform CHANNEL CHECK for each required instrumentation channel that is normally energized. | 31 days |
| SR 3.3.15.2 -----NOTE----- Neutron detectors are excluded from CHANNEL CALIBRATION. ----- Perform CHANNEL CALIBRATION. | 18 months |

Table 3.3.15-1
Post Accident Monitoring Instrumentation

| FUNCTION | REQUIRED CHANNELS | CONDITIONS REFERENCED FROM REQUIRED ACTION D.1 |
|--|---|--|
| 1. Wide Range Neutron Flux | 2 | E |
| 2. RCS Hot Leg Temperature | 2 | E |
| 3. RCS Hot Leg Level | 2 | F |
| 4. RCS Pressure (Wide Range) | 2 | E |
| 5. Reactor Vessel Water Level | 2 | F |
| 6. Reactor Building Water Level (Wide Range) | 2 | E |
| 7. Reactor Building Pressure (Wide Range) | 2 | E |
| 8. Penetration Flow Path Automatic Reactor Building Isolation Valve Position | 2 per penetration flow path ^{(a)(b)} | E |
| 9. Reactor Building Area Radiation (High Range) | 2 | F |
| 10. Deleted | | |
| 11. Pressurizer Level | 2 | E |
| 12. a. SG "A" Water Level – Low Range | 2 | E |
| b. SG "B" Water Level – Low Range | 2 | E |
| c. SG "A" Water Level – High Range | 2 | E |
| d. SG "B" Water Level – High Range | 2 | E |
| 13. a. SG "A" Pressure | 2 | E |
| b. SG "B" Pressure | 2 | E |
| 14. Condensate Storage Tank Level | 2 | E |
| 15. Borated Water Storage Tank Level | 2 | E |
| 16. Core Exit Temperature (CETs per quadrant) | 2 | E |
| 17. a. Emergency Feedwater Flow to SG "A" | 2 | E |
| b. Emergency Feedwater Flow to SG "B" | 2 | E |
| 18. High Pressure Injection Flow | 2 | E |
| 19. Low Pressure Injection Flow | 2 | E |
| 20. Reactor Building Spray Flow | 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.