

INSTRUMENTATION

ACCIDENT MONITORING INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.7.5 The accident monitoring instrumentation channels shown in Table 3.3.7.5-1 shall be OPERABLE.

APPLICABILITY: As shown in Table 3.3.7.5-1.

ACTION:

With one or more accident monitoring channels inoperable, take the ACTION required by Table 3.3.7.5-1.

SURVEILLANCE REQUIREMENTS

4.3.7.5 Each of the above required accident monitoring instrumentation channels shall be demonstrated OPERABLE by performance of the CHANNEL CHECK and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.3.7.5-1.

SUSQUEHANNA - UNIT 2

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SUSQUEHANNA - UNIT 2
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Amendment No. 50, 100

TABLE 3.3.7.5-1

ACCIDENT MONITORING INSTRUMENTATION

INSTRUMENT	REQUIRED NUMBER OF CHANNELS	MINIMUM CHANNELS OPERABLE	ACTION	APPLICABLE OPERATIONAL CONDITIONS
1. Reactor Vessel Steam Dome Pressure	2	1	80	1, 2
2. Reactor Vessel Water Level	2	1	80	1, 2
3. Suppression Chamber Water Level	2	1	80	1, 2
4. Suppression Chamber Water Temperature	8, 6 locations	6, 1/location	80	1, 2
5. Suppression Chamber Air Temperature	2	1	80	1, 2
6. Primary Containment Pressure	2/range	1/range	80	1, 2
7. Drywell Temperature	2	1	80	1, 2
8. Drywell Gaseous Analyzer				
a. Oxygen	2	1	80	1, 2#
b. Hydrogen	2	1	82	1, 2#
9. Safety/Relief Valve Position Indicators	1/valve*,##	1/valve*,##	80	1, 2
10. Containment High Radiation	2	1	81	1, 2
11. Noble gas monitors**				
a. Reactor Bldg. Vent	1	1	81	1, 2 and ***
b. SGTS Vent	1	1	81	1, 2 and ***
c. Turbine Bldg. Vent	1	1	81	1, 2
12. Primary Containment Isolation Valve Position	1/valve	1/valve	80	1, 2
13. Neutron Flux	21***	20***	80	1, 2

* Acoustic monitor.
 ** Mid-range and high-range channels.
 *** When moving irradiated fuel in the secondary containment.
 # See Special Test Exception 3.10.1
 ## Compliance with these requirements for the "S" SRV acoustic monitor is not required for the period beginning January 21, 1994, until the next unit shutdown of sufficient duration to allow for containment entry, not to exceed the sixth refueling and inspection outage.

REVISION OF THE REQUIREMENTS FOR THE EX-CORE NEUTRON FLUX MONITOR IS REQUIRED FOR THE PERIOD BEGINNING FEBRUARY 1994 UNTIL THE NEXT UNIT SHUTDOWN WHICH ALLOWS FOR CONTAINMENT ENTRY OF SUFFICIENT DURATION TO PROPERLY EVALUATE AND CORRECT THE IMPAIRED CONDITION, NOT TO EXCEED THE SEVENTH REFUELING AND INSPECTION OUTAGE.

TABLE 3.3.7.5-1 (Continued)

ACCIDENT MONITORING INSTRUMENTATION

ACTION STATEMENTS

ACTION 80 -

- a. With the number of OPERABLE accident monitoring instrumentation channels less than the Required Number of Channels shown in Table 3.3.7.5-1, restore the inoperable channel(s) to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours.
- b. With the number of OPERABLE accident monitoring instrumentation channels less than the Minimum Channels OPERABLE requirements of Table 3.3.7.5-1, restore the inoperable channel(s) to OPERABLE status within 48 hours or be in at least HOT SHUTDOWN within the next 12 hours.

ACTION 81 - With the number of OPERABLE channels less than required by the Minimum Channels OPERABLE requirement, initiate the preplanned alternate method of monitoring the appropriate parameter(s) within 72 hours, and:

- 1) either restore the inoperable channel(s) to OPERABLE status within 7 days of the event, or
- 2) prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within 14 days following the event outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.

ACTION 82 -

- a. With the number of OPERABLE channels one less than the Required Number of Channels shown in Table 3.3.7.5-1, restore the inoperable channel to OPERABLE status within 30 days or be in at least HOT SHUTDOWN within the next 12 hours.
- b. With the number of OPERABLE channels less than the Minimum Channels OPERABLE requirements of Table 3.3.7.5-1, restore at least one channel to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours.



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TABLE 4.3.7.5-1

ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION
1. Reactor Vessel Steam Dome Pressure	M	R
2. Reactor Vessel Water Level	M	R
3. Suppression Chamber Water Level	M	R
4. Suppression Chamber Water Temperature	M	R
5. Suppression Chamber Air Temperature	M	R
6. Primary Containment Pressure	M	R
7. Drywell Temperature	M	R
8. Drywell Oxygen/Hydrogen Analyzer	M	Q*
9. Safety/Relief Valve Position Indicators	M [#]	R [#]
10. Containment High Radiation	M	R**
11. Noble Gas Monitors a. Reactor Bldg. Vent b. SGTS Vent c. Turbine Bldg. Vent	M M M	R R R
12. Primary Containment Isolation Valve Position	M	NA
13. Neutron Flux	M	R

- For hydrogen analyzer, use sample gas containing:
 - a. Nominal zero volume percent hydrogen, balance nitrogen.
 - b. Nominal thirty volume percent hydrogen, balance nitrogen.

- CHANNEL CALIBRATION shall consist of an electronic calibration of the channel, not including the detector, for range decades above 10 R/hr and a one point calibration check of the detector below 10 R/hr with an installed or portable gamma source.

- Compliance with these requirements for the "S" SRV acoustic monitor is not required for the period beginning January 21, 1994, until the next unit shutdown of sufficient duration to allow for containment entry, not to exceed the sixth refueling and inspection outage.



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