

ANO-1 TECHNICAL SPECIFICATION  
PROPOSED PAGE CHANGES

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- 3.5.1.13 The Seismic Monitoring Instrumentation shall be operable with a minimum measurement range of 0.01 - 1.0 g for Triaxial Time - History Accelerographs, 0.05 - 1.0 g for Triaxial Peak Accelerographs, and 2-25.4 Hz for Triaxial Response Spectrum Recorders.
- 3.5.1.14 The Main Steam Line Radiation Monitoring Instrumentation shall be operable with a minimum measurement range from  $10^{-1}$  to  $10^4$  mR/hr, whenever the reactor is above the cold shutdown condition.

Table 3.5.1-1 (cont'd)

OTHER SAFETY RELATED SYSTEMS  
(Cont'd)

<u>Functional Unit</u>	<u>1</u> No. of channels	<u>2</u> No. of channels for system trip	<u>3</u> Min. operable channels	<u>4</u> Min. degree of redundancy	<u>5</u> Operator action if conditions of column 3 or 4 cannot be met
c. Triaxial Response-Spectrum Recorders					
1. 2XR-8350, 2 Containment Base Slab, 335' 6" (O/S Containment)	1	N/A	1	0	Note 27
15. Reactor Vessel Level Monitoring System	2	N/A	2	0	Note 28, 29
16. Hot Leg Level Measurement System (HLLMS)	2	N/A	2	0	Note 28, 29
17. Main Steam Line Radiation Monitors	1 /steam line	N/A	1/steam line	0	Note 30

Table 3.5.1-1 (cont'd)

28. With the number of OPERABLE channels one less than the minimum number of channels required to be OPERABLE:
- a. If repairs are feasible, restore the inoperable channel to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours.
  - b. If repair is not feasible without shutting down, operation may continue and a special report pursuant to specification 6.12.5 shall be submitted to the NRC within 30 days following the failure; describing the action taken, the cause of the inoperability, and the plans and schedules for restoring the channel to OPERABLE status during the next scheduled refueling outage.
29. With the number of OPERABLE channels two less than the minimum required to be OPERABLE:
- a. If repairs are feasible, restore at least one inoperable channel to OPERABLE status within 48 hours or be in at least HOT SHUTDOWN within the next 12 hours.
  - b. If repair is not feasible without shutting down, operation may continue and a special report pursuant to specification 6.12.5 shall be submitted to the NRC within 30 days following the failure; describing the action taken, the cause of the inoperability, and the plans and schedules for restoring the channels to OPERABLE status during the next scheduled refueling outage.
30. With the number of OPERABLE Channels less than required by the Minimum Channels OPERABLE requirements, 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 6.12.5 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.

Table 4.1-1 (Cont'd)

	<u>Channel Description</u>	<u>Check</u>	<u>Test</u>	<u>Calibrate</u>	<u>Remarks</u>
20.	Reactor Building Spray System System Logic Channels	NA	M(1)	NA	(1) Including RB spray pump, spray valves, and chem. add. valve logic channels.
21.	Reactor Building Spray System Analog Channels				
a.	Reactor Building Pressure Channels	NA	M	R	
22.	Pressurizer Temperature Channels	S	NA	R	
23.	Control Rod Absolute Position	S(1)	NA	R	(1) Compare with Relative Position Indicator.
24.	Control Rod Relative Position	S(1)	NA	R	(1) Check with Absolute Position Indicator
25.	Core Flooding Tanks				
a.	Pressure Channels	S	NA	R	
b.	Level Channels	S	NA	R	
26.	Pressurizer Level Channels	S	NA	R	
27.	Makeup Tank Level Channels	D	NA	R	
28.	Radiation Monitoring Systems other than containment high range monitors (item 57)				(1) Check functioning of self-checking feature on each detector.
a.	Process Monitoring System	S	Q	R	
b.	Area Monitoring System	S	M(1)	R	
c.	Main Steam Line Radiation Monitors	S	M	R	

Table 4.1-1 (Cont.)

<u>Channel Description</u>	<u>Check</u>	<u>Test</u>	<u>Calibrate</u>	<u>Remarks</u>
29. High and Low Pressure Injective Systems: Flow Channels	N	NA	R	
30. Decay heat removal system isolation valve automatic closure and interlock system	S(1)(2)	M(1)(3)	R	(1) Includes RCS Pressure Analog Channel (2) Includes CFT Isolation Valve Position (3) At least once every refueling shutdown, with Reactor Coolant System Pressure greater than or equal to 200 psig, but less than 300 psig, verify automatic isolation of the decay heat removal system from the Reactor Coolant System on high Reactor Coolant System pressure.
31. Turbine overspeedtrip mechanism	NA	R	NA	(1) The provisions of Specification 4.0.4 are not applicable.
32. Diesel generator protective relaying starting interlocks and circuitry	M	Q	NA	
33. Off-site power undervoltage and protective relaying interlocks and circuitry	W	R(1)	R(1)	(1) Shall be tested during refueling shutdown to demonstrate selective load shedding interlocks function during manual or automatic transfer of Unit 1 auxiliary load to Startup Transformer No. 2.
34. Borated water storage tank level indicator	W	NA	R	
35. Reactor trip upon loss of main feedwater circuitry	M	PC	R	

- h. Inoperable Fire Detection Instrumentation
- i. Inoperable Fire Suppression Systems
- j. Degraded Auxiliary Electrical Systems, Specification 3.7.2.H.
- k. Inoperable Reactor Vessel Level Monitoring Systems, Table 3.5.1-1
- l. Inoperable Hot Leg Level Measurement Systems, Table 3.5.1-1
- m. Inoperable Main Steam Line Radiation Monitors, Specification 3.5.1, Table 3.5.1-1.

ANO-2 TECHNICAL SPECIFICATION  
PROPOSED PAGE CHANGES



TABLE 3.3-6

RADIATION MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ALARM/TRIP SETPOINT</u>	<u>MEASUREMENT RANGE</u>	<u>ACTION</u>
1. AREA MONITORS					
a. Spent Fuel Pool Area Monitor	1	Note 1	$\leq 1.5 \times 10^{-2}$ R/hr	$10^{-6} - 10^1$ R/hr	13
b. Containment High Range	2	1, 2, 3 & 4	Not Applicable	$1 - 10^7$ R/hr	18
2. PROCESS MONITORS					
a. Containment					
i. Gaseous Activity					
a) Purge & Exhaust Isolation	1	5 & 6	$\leq 2 \times$ background	$10 - 10^6$ cpm	16
b) RCS Leakage Detection	1	1, 2, 3 & 4	Not Applicable	$10 - 10^6$ cpm	14
ii. Particulate Activity					
a) RCS Leakage Detection	1	1, 2, 3 & 4	Not Applicable	$10 - 10^6$ cpm	14
b. Control Room Ventilation Intake Duct Monitor	1	ALL MODES	$\leq 2 \times$ background	$10 - 10^6$ cpm	17
c. Main Steam Line Radiation Monitors	1/Steam Line	1, 2, 3, & 4	Not Applicable	$10^{-1} - 10^4$ mR/hr	19

Note 1 - With fuel in the spent fuel pool or building

TABLE 3.3-6 (Continued)

TABLE NOTATION

- ACTION 13 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, perform area surveys of the monitored area with portable monitoring instrumentation at least once per 2<sup>1/2</sup> hours.
- ACTION 14 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, comply with the ACTION requirements of Specification 3.4.6.1.
- ACTION 16 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, complete the following:
- a. If performing CORE ALTERATIONS or moving irradiated fuel within the reactor building, secure the containment purge system or suspend CORE ALTERATIONS and movement of irradiated fuel within the reactor building.
  - b. If a containment PURGE is in progress, secure the containment purge system.
  - c. If continuously ventilating, verify the SPING monitor operable or perform the ACTIONS of 3.5.3.9, or secure the containment purge system.
- ACTION 17 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, within 1 hour initiate and maintain operation of the control room emergency ventilation system in the recirculation mode of operation.
- ACTION 18 - With the number of channels OPERABLE one less than required by the Minimum Channels OPERABLE requirement, (1) either restore the inoperable channel to OPERABLE status within 7 days or (2) prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within 30 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. With both channels inoperable, initiate alternate methods of monitoring the containment radiation level within 72 hours in addition to the actions described above.
- ACTION 19 - With the number of OPERABLE Channels less than required by the Minimum Channels OPERABLE requirements, 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.

TABLE 4.3-3

## RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE REQUIRED</u>
1. AREA MONITORS				
a. Spent Fuel Pool Area Monitor	S	R	M	Note 1
b. Containment High Range	S	R Note 4	M	1, 2, 3, & 4
2. PROCESS MONITORS				
a. Containment				
i. Gaseous Activity				
a) Purge & Exhaust Isolation	Note 2	R	Note 3	5 & 6
b) RCS Leakage Detection	S	R	M	1, 2, 3, & 4
ii. Particulate Activity				
a) RCS Leakage Detection	S	R	M	1, 2, 3, & 4
b. Control Room Ventilation Intake Duct Monitor	S	R	M	ALL MODES
c. Main Steam Line Radiation Monitors	S	R	M	1, 2, 3, & 4

Note 1 - With fuel in the spent fuel pool or building.

Note 2 - Within 8 hours prior to initiating containment purge operations and at least once per 12 hours during containment purge operations.

Note 3 - Within 31 days prior to initiating containment purge operations and at least once per 31 days during containment purge operations.

Note 4 - Acceptable criteria for calibration are provided in Table II.F.1-3 of NUREG-0737.

## ADMINISTRATIVE CONTROLS

1. Radiological Environmental Monitoring Sample Analysis, Specification 3.12.1.
  
- m. Unplanned Offsite Release during one hour period of 1) more than 1 curie of radioactive material in liquid effluents, 2) more than 150 curies of noble gas in gaseous effluents, or 3) more than 0.05 curies of radioiodine in gaseous effluents. This report shall be submitted within 30 days of the occurrence of the event and shall include the following information:
  1. Description of the occurrence.
  2. Identify the cause(s) of exceeding the limit(s).
  3. Explain corrective action(s) taken to mitigate occurrence.
  4. Define action(s) taken to prevent recurrence.
  5. Summary of the consequence(s) of occurrence.
  
- n. Inoperable Reactor Vessel Level Monitoring System (RVLMS), Specification 3.3.3.6, Table 3.3-10 Item 14.
  
- o. Inoperable Main Steam Line Radiation Monitors, Specification 3.3, Table 3.3-6.

### SEMI-ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT\*

6.9.3 Routine radioactive effluent release reports covering the operating of the unit during the previous 6 months of operations shall be submitted within 60 days after January 1 and July 1 of each year.

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\*A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station; however, for units with separate radwaste system, the submittal shall specify the releases of radioactive material from each unit.