

Docket No. 50-336

Attachment 1

Millstone Nuclear Power Station, Unit No. 2  
Proposed Revisions to Technical Specifications  
Control Room Habitability Modifications

April, 1985

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PDR ADOCK 05000336  
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## INSTRUMENTATION

### CHLORINE DETECTION SYSTEMS

#### LIMITING CONDITION FOR OPERATION

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3.3.3.6 Two separate and independent chlorine detection systems, with their alarm/trip setpoints adjusted to a chlorine concentration of  $\leq 1$  ppm, shall be OPERABLE with the detectors located adjacent to control room outside air intake duct.

APPLICABILITY: MODES 1, 2, 3 and 4.

#### ACTION:

- a. With one chlorine detection system inoperable, restore the inoperable detection system to OPERABLE status within 7 days or within the next 6 hours initiate and maintain operation of the control room emergency ventilation system in the recirculation mode of operation.
- b. With no chlorine detection system OPERABLE, within 1 hour initiate and maintain operation of the control room emergency ventilation system in the recirculation mode of operation.
- c. The provisions of Specification 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.3.3.6 Each chlorine detection system shall be verified energized at least once per 12 hours and demonstrated OPERABLE by performance of a CHANNEL CALIBRATION at least once per 18 months.

## INSTRUMENTATION

### BASES

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#### 3/4.3.3.6 CHLORINE DETECTION SYSTEMS

The operability of the chlorine detection systems ensures that an accidental chlorine release will be detected promptly and the necessary protective actions will be automatically initiated to provide protection for control room personnel. Upon detection of a high concentration of chlorine, the control room emergency ventilation system will automatically isolate the control room and initiate its operation in the recirculation mode of operation to provide the required protection. The chlorine detection systems required by this specification are consistent with the recommendations of Regulatory Guide 1.95, "Protection of Nuclear Power Plant Control Room Operators Against an Accidental Chlorine Release".

#### 3/4.3.3.7 FIRE DETECTION INSTRUMENTATION

OPERABILITY of the fire detection instrumentation ensures that adequate warning capability is available for the prompt detection of fires. This capability is required in order to detect and locate fires in their early stages. Prompt detection of fires will reduce the potential for damage to safety related equipment and is an integral element in the overall facility fire protection program.

In the event that a portion of the fire detection instrumentation is inoperable, the establishment of frequent fire patrols in the affected areas is required to provide detection capability until the inoperable instrumentation is restored to OPERABILITY.

#### 3/4.3.3.8 ACCIDENT MONITORING INSTRUMENTATION

The OPERABILITY of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables during and following an accident. This capability is consistent with the recommendations of NUREG-0578, "TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations".

## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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1. Verifying that the cleanup system satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a, C.5.c and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 2500 cfm  $\pm$  10%.
  2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978. The carbon sample shall have a removal efficiency of  $\geq$  95 percent.
  3. Verifying a system flow rate of 2500 cfm  $\pm$  10% during system operation when tested in accordance with ANSI N510-1975.
- d. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.
- e. At least once per 18 months by:
1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 6 inches Water Gauge while operating the system at a flow rate of 2500 cfm  $\pm$  10%.
  2. Verifying that on a recirculation signal, the system automatically switches into a recirculation mode of operation with flow through the HEPA filters and charcoal adsorber banks.
- f. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 2500 cfm  $\pm$  10%.

## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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- g. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 2500 cfm  $\pm$  10%.



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 Storage Criticality Monitor and Ventilation System Isolation	2	*	$\leq 100$ mR/hr	$10^{-1} - 10^{+4}$ mR/hr	13 and 15
b. Control Room Isolation	1	ALL MODES	$\leq 2$ mR/hr	$10^{-1} - 10^4$ mR/hr	16
2. PROCESS MONITORS					
a. Containment Atmosphere-Particulate	1	ALL MODES	$\leq$ the value determined in accordance with specification 4.3.2.1.4.	$10 - 10^{+6}$ cpm	14 and (a)
b. Containment Atmosphere-Gaseous	1	ALL MODES	$\leq$ the value determined in accordance with Specification 4.3.2.1.4.	$10 - 10^{+6}$ cpm	14 and (a)

\*With fuel in storage building.