

Docket No. 50-423  
B13320

Attachment 1

Millstone Nuclear Power Station, Unit No. 3  
Proposed Changes to Technical Specifications

August 1989

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## INSTRUMENTATION

### FIRE DETECTION INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

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3.3.3.7 As a minimum, the fire detection instrumentation for each fire detection zone shown in Table 3.3-11 shall be OPERABLE.

APPLICABILITY: Whenever equipment protected by the fire detection instrument is required to be OPERABLE.

#### ACTION:

- a. With any, but not more than one-half the total in any fire zone, Function A fire detection instruments shown in Table 3.3-11 inoperable, restore the inoperable instrument(s) to OPERABLE status within 14 days or within the next 1 hour establish a fire watch patrol to inspect the zone(s) with the inoperable instrument(s) at least once per hour, unless the instrument(s) is located inside the containment, then inspect that containment zone at least once per 8 hours (or monitor the containment air temperature at least once per hour at the locations listed in Specification 4.6.1.6).
- b. With more than one-half of the Function A fire detection instruments in any fire zone shown in Table 3.3-11 inoperable, or with any Function B fire detection instruments shown in Table 3.3-11 inoperable, or with any two or more adjacent fire detection instruments shown in Table 3.3-11 inoperable, within 1 hour establish a fire watch patrol to inspect the zone(s) with the inoperable instrument(s) at least once per hour, unless the instrument(s) is located inside the containment, then inspect that containment zone at least once per 8 hours (or monitor the containment air temperature at least once per hour at the locations listed in Specification 4.6.1.5).
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.3.3.7.1 Each of the above required fire detection instruments which are accessible during plant operation shall be demonstrated OPERABLE at least once per 6 months by performance of a FIRE DETECTOR OPERATIONAL TEST. Fire detectors which are not accessible during plant operation(\*) shall be demonstrated OPERABLE by the performance of a FIRE DETECTOR OPERATIONAL TEST during each COLD SHUTDOWN exceeding 24 hours unless performed in the previous 6 months.

4.3.3.7.2 The NFPA Standard 72D supervised circuits supervision associated with the detector alarms of each of the above required fire detection instruments shall be demonstrated OPERABLE at least once per 6 months.

\*Includes detectors in the Reactor Containment, HIGH Radiation Areas, and areas contaminated in excess of 100,000 dpm per 100 cm<sup>2</sup>.

TABLE 3.3-11

## FIRE DETECTION INSTRUMENTS

INSTRUMENT LOCATION	TOTAL NUMBER OF INSTRUMENTS*		
	HEAT (x/y)	FLAME (x/y)	SMOKE (x/y)
1. <u>Containment**</u>			
a. Elevation -24'6"	8/0		
b. RCP Cubicle D	4/0		
c. RCP Cubicle A	4/0		
d. RCP Cubicle C	4/0		
e. RCP Cubicle B	4/0		
f. Electrical Penetration Area, El. 24'6"			16/0
g. Outer Annulus, El. 3'8" and 24'6"			17/0
2. <u>Auxiliary Building</u>			
a. East MCC/Rod Area, X-Zone 1			0/16
b. West MCC/Rod Area, X-Zone 1			0/16
c. North Floor Area, El. 4'6"			19/0
d. RPCCW Pump Area, El. 24'6"			19/0
e. Charging Pump Area			3/0
f. General Area, El. 43'6"			26/0
g. General Area, El. 66'6"			23/0
h. East MCC/Rod Area, X-Zone 2			0/12
i. West MCC/Rod Area, X-Zone 2			0/12
j. General Area, El. 4'6"			8/0
3. <u>ESF Building</u>			
a. RSS Pump 1 Area			4/0
b. RSS Pump 2 Area			4/0
c. RHR HX Area North			8/0
d. RHR HX Area South			4/0
e. General Area, El. 4'6"			2/0
f. FWA Pump Area 1A Area			2/0
g. QSS Pump Area			4/0
h. FWA Pump 1B Area			4/0
i. FWA Pump 2 Area			5/0
j. North HVAC Area			2/0
k. South HVAC Area			2/0
l. H <sub>2</sub> Recombiner Bldg.			7/0

\*(x/y): x is number of Function A (early warning fire detection and notification only) instruments.  
y is number of Function B (actuation of Fire Suppression Systems and early warning and notification) instruments.

\*\*The fire detection instruments located within the containment Electrical Penetration Area, El. 24'6", are required to be OPERABLE during the performance of Type A containment leakage rate tests. All other fire detection instruments located within the containment are not required to be OPERABLE during the performance of Type A containment leakage rate tests.

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

<u>INSTRUMENT LOCATION</u>	<u>TOTAL NUMBER OF INSTRUMENTS*</u>		
	<u>HEAT</u> (x/y)	<u>FLAME</u> (x/y)	<u>SMOKE</u> (x/y)
<u>4. Control Building</u>			
a. Switchgear A, X-Zone 1			0/19
b. Cable Tray A, El. 4'6", X-Zone 1			0/19
c. A Battery Rooms			8/0
d. Switchgear B, X-Zone 1			0/20
e. Cable Tray B, El. 4'6", X-Zone 1			0/16
f. B Battery Rooms			6/0
g. Cable Spreading Room, NE X-Zone 1			0/8
h. Cable Spreading Room, SE X-Zone 1			0/11
i. Cable Spreading Room, NW X-Zone 1			0/8
j. Cable Spreading Room, SW X-Zone 1			0/11
k. Computer Room Floor			2/0
l. Instrument Rack Room East Floor			3/0
m. Instrument Rack Room West Floor			5/0
n. Computer Room			4/0
o. Instrument Rack Room East			7/0
p. Instrument Rack Room West			12/0
q. Computer Room HALON	0/4		
r. Instrument Rack HALON	0/17		
s. Control Room	1/0		28/0
t. HVAC Room			9/0
u. Chiller Room			3/0
v. Switchgear A, X-Zone 2			0/21
w. Switchgear B, X-Zone 2			0/26
x. Cable Spreading Room South, X-Zone 2			0/23
y. Cable Spreading Room South, X-Zone 2			0/16
<u>5. Emergency Diesel Building</u>			
a. Diesel Generator A Area	14/0	4/0	1/0
b. Diesel Generator B Area	14/0	4/0	1/0
c. Fuel Oil Vault A	0/3		2/0
d. Fuel Oil Vault B	0/3		2/0
<u>6. Intake Structure</u>			
a. Service Water Pump A			4/0
b. Service Water Pump B			4/0
c. Screen Wash Area			6/0
<u>7. Service Building</u>			
a. Cable Tunnel North, X-Zone 1			0/6
b. Cable Tunnel South, X-Zone 1			0/7
c. Cable Tunnel North, X-Zone 2			0/5
d. Cable Tunnel South, X-Zone 2			0/6

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

<u>INSTRUMENT LOCATION</u>	<u>TOTAL NUMBER OF INSTRUMENTS*</u>		
	<u>HEAT</u> (x/y)	<u>FLAME</u> (x/y)	<u>SMOKE</u> (x/y)
8. <u>Fuel Building</u>			
a. General Area			17/0
b. Fuel Pool Cooling Pump Area			4/0
c. RSST A	0/10		
d. RSST B	0/10		

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Attachment 2

Millstone Nuclear Power Station, Unit No. 3  
Description of Proposed Changes to Technical Specifications

August 1989

Millstone Nuclear Power Station, Unit No. 3  
Description of Proposed Changes to Technical Specifications

A. Description of Changes

1. Section 3.3.3.7

- a. In Action Section b, the referenced specification must be changed from 4.6.1.6 to 4.6.1.5. The purpose of this section is to allow containment temperature to be monitored in the event of a malfunction of the fire detection system. Section 4.6.1.6 deals with structural integrity and is incorrectly referenced under the existing specification.
- b. Table 3.3-11 is being revised to reflect actual "as-built" plant conditions with regard to number of installed detectors and their primary function. The fire detector lists in Table 3.3-11 have been modified to include the numbers of detectors installed in the final plant configuration, to break down the detector numbers into areas which correspond to the zones monitored by the fire detection system, and to redefine the areas of coverage to those that include safety-related equipment. By the revision of Table 3.3-11, the discrepancy between the fire detectors being monitored in the surveillance procedure (SP 3641D.3) and the quantities of detectors specified in Technical Specifications will be eliminated.

2. Section 4.3.3.7.1

The existing surveillance requirements section will be revised to clarify the surveillance requirements for fire detectors located in high radiation areas. A footnote will be added for ALARA considerations to define the meaning of "not accessible during plant operation" to include high radiation and highly contaminated areas.

B. Evaluation of Changes

The proposed changes are mainly administrative in nature and do not include any hardware modifications. As such, there are no credible failure modes associated with these changes.

The changes are proposed mainly to reflect "as-built" conditions of the plant's fire detection systems. The changes provide a new total number of installed detectors and describe their primary function. Some wording changes describing the instrument location are also provided to clarify the exact location. In addition, clarification has been made with regards to the inspection frequency requirements for detectors located in

high radiation or highly contaminated areas. Discrepancies with references to associated Technical Specifications were also corrected as part of this change. As such, the changes are mainly administrative in nature and do not affect the current coverage or operability status of the detection systems to fulfill their primary design function, which is to detect a fire in its early stages. The revised Technical Specification will not adversely affect operability of fire detection systems or reliability of fire protection systems at Millstone Unit No. 3. No design basis analyses are affected by this change.

The changes do not increase the probability of any accident. Therefore, the probability of a beyond design basis accident has not been increased to the point where it should be considered within the design basis due to the change. In addition, there are no impacts on event consequences; therefore, this changes does not impact protective boundaries.

NNECO has reviewed the proposed changes in accordance with 10CFR50.92 and, based on the above, has concluded that the changes do not involve a significant hazards consideration in that these changes would not:

1. Involve a significant increase in the probability of occurrence or consequences of an accident previously analyzed. The changes are mostly administrative in nature and are consistent with "as-built" plant conditions. There are no design basis accidents adversely affected due to the changes.
2. Create the possibility of a new or different kind of accident from any previously analyzed. Since there are no changes in the way the plant is operated, the potential for an unanalyzed accident is not created. No new failure modes are introduced.
3. Involve a significant reduction in a margin of safety. Since the changes do not affect the consequences of any accident previously analyzed, there is no reduction in a margin of safety.