

INSTRUMENTATION

FIRE DETECTION INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.8 As a minimum, the fire detection instrumentation for each fire detection zone shown in Table 3.3-14 shall be OPERABLE.

APPLICABILITY: Whenever equipment in that fire detection zone is required to be OPERABLE.

ACTION: With the number of OPERABLE fire detection instrument(s) less than the minimum number OPERABLE requirement of Table 3.3-14:

- a. Within 1 hour establish a fire watch patrol to inspect the accessible zone(s) with the inoperable instrument(s) at least once per hour, and
- b. Restore the inoperable instrument(s) to OPERABLE status within 14 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the instrument(s) to OPERABLE status.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.8.1 Each of the above required accessible fire detection instruments shall be demonstrated OPERABLE at least once per 6 months by performance of a CHANNEL FUNCTIONAL TEST. Each of the above required inaccessible fire detection instrument shall be demonstrated OPERABLE at least once per 18 months by performance of a CHANNEL FUNCTIONAL TEST.

4.3.3.8.2 The NFPA Code 72D Class A 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.

4.3.3.8.3 The non-supervised circuits between the local panels in Specification 4.3.3.8.3 and the control room shall be demonstrated OPERABLE at least once per 31 days.

FIRE DETECTION INSTRUMENTS

<u>INSTRUMENT LOCATION</u>			<u>MINIMUM INSTRUMENTS OPERABLE</u>		
			<u>HEAT</u>	<u>FLAME</u>	<u>SMOKE</u>
1. <u>Containment</u>					
#a.	FDZ-RCP 1	Elev. 603'	0	0	1 *
#b.	FDZ-RCP 2	Elev. 603'	0	0	1 *
#c.	FDZ-RCP 3	Elev. 603'	0	0	1 *
#d.	FDZ-RCP 4	Elev. 603'	0	0	1 *
#e.	FDZ-PZR	Elev. 603'	0	0	1 *
#f.	FDZ 214 - Core Flooding Tank 1-1 Area				
		Elev. 565'	0	0	3 *
#g.	FDZ 215 - Cmt. Letdown Cooler Area				
		Elev. 565'	0	0	2 *
#h.	FDZ 220 - Incore Instrument Trench Area				
		Elev. 565'	0	0	4 *
#i.	FDZ 317 - Hatch Area - Elev. 565'		0	0	20 *
#j.	FDZ 410 - East Passage - Elev. 603'/657'		0	0	9 *
2. <u>Containment Annulus</u>					
#a.	FDZ-A208	Elev. 590'	0	0	10
#b.	FDZ-236H	Elev. 774'	0	0	3
#c.	FDZ-236L	Elev. 590'	0	0	9
3. <u>Auxiliary Building</u>					
a.	FDZ 402 - #1 Electrical Penetration Rm.				
		Elev. 603'	0	0	12
b.	FDZ 405 - Auxiliary Building Storage Rm.				
		Elev. 603'	0	0	1
c.	FDZ 427 - #2 Electrical Penetration Rm.				
		Elev. 603'	0	0	7
d.	FDZ 303 - #3 Mechanical Penetration Rm.				
		Elev. 585'	0	0	12
e.	FDZ 304 - Corridor to Mech. Pent Rms 3&4				
		Elev. 585'	0	0	4
f.	FDZ 310 - Passage to BA Mix Tank				
		Elev. 585'	0	0	8
g.	FDZ 312 - Spent Fuel Pool Pump Rm.				
		Elev. 585'	0	0	4
h.	FDZ 314 - #4 Mech. Pent. Room				
		Elev. 585'	0	0	17
i.	FDZ 300 - Fuel Handling Area				
		Elev. 585'	0	0	5

#Fire Detectors in high radiation areas which are NOT accessible.

I INSTRUMENT LOCATIONMINIMUM INSTRUMENTS OPERABLE

	<u>HEAT</u>	<u>FLAME</u>	<u>SMOKE</u>
3. <u>Auxiliary Building (Continued)</u>			
j. FDZ 209 - Corridor to #1 Mech. Pent. Rm. Elev. 565'	0	0	3
k. FDZ 227 - Boric Acid Evap Passageway Elev. 565'	0	0	6
l. FDZ 208 - #1 Mechanical Penetration Rm. Elev. 565'	0	0	10
m. FDZ 231 - Clean Waste Booster Pump Rm. Elev. 565'	0	0	1
n. FDZ 232 - Primary & Deborating Demin Vlv Rm. - Elev. 565'	0	0	1
o. FDZ 234 - Boric Acid Evaporator Rm 1-2 Elev. 565'	0	0	1
p. FDZ 235 - Boric Acid Evaporator Rm 1-1 Elev. 565'	0	0	1
q. FDZ 236 - #2 Mechanical Penetration Rm. Elev. 565'	0	0	4
r. FDZ 240 - Boric Acid Addition Tank Rm. Elev. 565'	0	0	5
s. FDZ 241 - Passage to B.A. Addition Tk Rm. Elev. 565'	0	0	2
t. FDZ 101 - Equipment and Pipe Tunnel Elev. 545'	0	0	1
u. FDZ 105 - ECCS Pump Room 1-1 Elev. 545'	0	0	4
v. FDZ 110 - Corridor to Central Area of Aux Bldg. - Elev. 545'	0	0	5
w. FDZ 113 - Decay Heat Exchange Pit Elev. 545'	0	0	1
x. FDZ 115 - ECCS Pump Room 1-2 Elev. 545'	0	0	2
y. FDZ 124 - Clean Waste Receiver Tank Rm. 1-1 - Elev. 545'	0	0	4
4. <u>Auxiliary Building Fan Rooms</u>			
a. FDZ 500 - Radwaste & Fuel Handling Area and Air Supply Area - Elev. 623'	0	0	20
b. FDZ 501 - Radwaste Exhaust Equipment and Main Station Exhaust Fan Room Elev. 623'	0	0	22
c. FDZ 515 - Purge and Exhaust Equipment Rm. Elev. 623'	0	0	22
d. FDZ 516 - Non-rad Air and Exhaust Equip. Rm. - Elev. 623'	0	0	5

INSTRUMENT LOCATIONMINIMUM INSTRUMENTS OPERABLE

	<u>HEAT</u>	<u>FLAME</u>	<u>SMOKE</u>
5. <u>Control Room Complex</u>			
a. FDZ 505 - Main Control Board Cabinets Elev. 623'	0	0	3
b. FDZ 505 - Control Cabinet Room Elev. 623'	0	0	5
c. FDZ 505 - Computer Room - Elev. 623'	0	0	1
6. <u>Cable Spreading Room</u>			
a. FDZ 422A - Elev. 613'	0	0	5
7. <u>A/C Equipment Room</u>			
a. FDZ 603 - Elev. 643'	0	0	11
8. <u>Diesel Generator Rooms</u>			
**a. FDZ 318 - Diesel Generator Rm. 1-1 Elev. 585'	0	0	5
**b. FDZ 319 - Diesel Generator Rm. 1-2 Elev. 585'	0	0	4
c. FDZ 321A - Diesel Generator Day Tank Room 1-1 - Elev. 5	0	0	1
d. FDZ 320A - Diesel Generator Day Tank Room 1-2 - Elev. 5	0	0	1
9. <u>Battery Rooms</u>			
a. FDZ 428A - Battery Room B - Elev. 603'	0	0	2
b. FDZ 429B - Battery Room A - Elev. 603'	0	0	2
10. <u>Component Cooling Water Pump Room</u>			
a. FDZ 328 - Elev. 585'	0	0	9
11. <u>Feed Pump Rooms</u>			
a. FDZ 237 - Auxiliary Feed Pump 1-1 Elev. 565'	0	0	3
b. FDZ 238 - Auxiliary Feed Pump 1-2 Elev. 565'	0	0	3

INSTRUMENT LOCATIONMINIMUM INSTRUMENTS OPERABLE

	<u>HEAT</u>	<u>FLAME</u>	<u>SMOKE</u>
5. <u>Control Room Complex</u>			
a. FDZ 505 - Main Control Board Cabinets Elev. 623'	0	0	3
b. FDZ 505 - Control Cabinet Room Elev. 623'	0	0	5
c. FDZ 505 - Computer Room - Elev. 623'	0	0	1
6. <u>Cable Spreading Room</u>			
a. FDZ 422A - Elev. 623'	0	0	5
7. <u>A/C Equipment Room</u>			
a. FDZ 603 - Elev. 643'	0	0	11
8. <u>Diesel Generator Rooms</u>			
**a. FDZ 318 - Diesel Generator Rm. 1-1 Elev. 585'	0	0	5
**b. FDZ 319 - Diesel Generator Rm. 1-2 Elev. 585'	0	0	4
c. FDZ 321A - Diesel Generator Day Tank Room 1-1 - Elev. 5	0	0	1
d. FDZ 320A - Diesel Generator Day Tank Room 1-2 - Elev. 5	0	0	1
9. <u>Battery Rooms</u>			
a. FDZ 428A - Battery Room B - Elev. 603'	0	0	2
b. FDZ 429B - Battery Room A - Elev. 603'	0	0	2
10. <u>Component Cooling Water Pump Room</u>			
a. FDZ 328 - Elev. 585'	0	0	9
11. <u>Feed Pump Rooms</u>			
a. FDZ 237 - Auxiliary Feed Pump 1-1 Elev. 565'	0	0	3
b. FDZ 238 - Auxiliary Feed Pump 1-2 Elev. 565'	0	0	3

INSTRUMENT LOCATIONMINIMUM INSTRUMENTS OPERABLE12. Switchgear Rooms

	<u>HEAT</u>	<u>FLAME</u>	<u>SMOKE</u>
a. FDZ 324 - CD High Voltage Switchgear Elev. 585'	0	0	3
b. FDZ 325 - A High Voltage Switchgear Elev. 585'	0	0	8
c. FDZ 323 - B High Voltage Switchgear Elev. 585'	0	0	11
d. FDZ 428 - F High Voltage Switchgear Elev. 603'	0	0	12
e. FDZ 429 - E High Voltage Switchgear Elev. 603'	0	0	6

13. Intake Structure

a. FDZ 052 - Diesel Fire Pump Room Elev. 576'	0	0	1
b. FDZ 052- Service Water Pump Room Elev. 576'	0	0	3
c. FDZ 053 - Service Water Vlv. Room Elev. 565'	0	0	6

*The fire detection instruments located within the Containment are not required to be OPERABLE during the performance of Type A Containment Leakage Rate Tests.

**These detectors automatically actuate fire suppression systems.