

LIMITING CONDITION FOR OPERATION AND SURVEILLANCE REQUIREMENTS

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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 3.3-11 shall be OPERABLE.

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

# ACTION:

2. 1

- 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 except for the annulus, restore the inoperable instrument(s) to OPER-ABLE 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 air temperature at least once per hour at the locations listed in Specification 4.6.1.5.
- b. With more than one-half of the Function A fire detection instruments in any fire zone shown in Table 3.3-11 inoperable except for the annulus, 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 air temperature at least once per hour at the locations listed in Specification 4.6.1.5.
- c. With both annulus detection instruments inoperable, restore at least 1 detector to operable status or within the next 1 hour establish a fire watch patrol to inspect the zone at least once per eight hours.\*
- d. The provisions of Specification 3.0.3 and 3.0.4 are not applicable.

# SURVEILLANCE REQUIREMENTS

4.3.3.8.1 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 CHANNEL FUNCTIONAL TEST. Fire detectors which are not accessible during plant operation shall be demonstrated OPERABLE by the performance of a CHANNEL FUNCTIONAL TEST during each COLD SHUTDOWN exceeding 24 hours unless performed in the previous 6 months.

4.3.3.8.2 The NFPA Standard 72D supervised circuits supervision associated with the detector alarms of each of the above required fire detection instruments which are accessible during plant operation shall be demonstrated OPERABLE at least once per 6 months. Circuits which are not accessible during plant operation shall be demonstrated OPERABLE during each COLD SHUTDOWN exceeding 24 hours unless performed in the previous 6 months.

\* Fire watch patrol may be temporarily suspended during performance of Specification 4.6.6.1.a.

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Existing

INSTRUMENTATION

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FIRE DETECTION INSTRUMENTATION

# SURVEILLANCE REQUIREMENTS (Continued)

4.3.3.8.3 The nonsupervised circuits associated with detector alarms between the instrument and the control room shall be demonstrated OPERABLE at least once per 31 days.

4.3.3.8.4 Each of the resistor wires required by Table 3.3-11 shall be demonstrated OPERABLE at least once per 6 months by verifying the proper wire resistance.

Existing TABLE 3.3-11

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# TABLE 3.3-11 FIRE DETECTION INSTRUMENTS

				TOTA	NUMBE	R OF
ZC	INE	ROOM NAME/NUMBER	ELEVATIO	N HEAT	FLAME (x/y)	SMOKE (x/y)
1.	REACTOR	AUXILIARY BUILDING				
RAB	14	Main Control Panels 1,2,3,4,6,7,8,35,3	36 +46			10/0
RAB	14	Control Room Proper/304	+46			20/0
RAB	18	Emergency Equip. H&V Room/314	+46			0/12
RAB	10	Computer Room (above raised floor)/300	5 +46			5/0
		Computer Room (below raised floor)/300	5 +46			0/7
RAB	2	Ventilation Equip. Room/299	+46			0/35
RAB	3	RAB Corridor to Relay Room/261	+35	0/1(3)		4/0
		RAB HVAC Switchgear Equip. Room/323	+46			0/10
RAB	3A	RAB Battery Exhaust Fan Room/405	+69			0/2
RAB	4	Cable Vault/250	+35			0/2/
RAB	5	Electrical Penetration Area "A"/203	+10			0/14
RAB	5	Electrical Penetration Area "B"/203A	+35	(2)		12/0
RAB	/	Relay Room/202	+35	(3)		2/0
		Isolation Panels (5 compartments	+33			6/ 4
0.40	0.8	High Voltage Switchgear Room "A"/212A	+21	0/1(1)		18/0
DAD	00	Electrical Equip Room/2258 and High	+21	0/1(2)		28/0
RAD	00	Voltane Switchnear 1000 18"/21				
		480V Switchgear 3A32 Room	+21	(2)		2/0
PAR	80	High Voltage Switchgear Room	+23	(1)		8/0
nne		"A-B"/2128				
RAB	8E	CEA M/G:Set Room/216	+21			2/0
RAB	9	Remote Shutdown Panel Room/217 4	+21			1/0
RAE	11	Battery Room "B"/213	+21			2/0
RAB	12	Sattery Room "AB"/214A	+21			2/0
RAB	13	Battery Room "A"/214	+21	and the second		2/0
RAB	15	Emergency Diesel Gen. "B" Room/222	+21	0/1		
RAB	15A	Emergency Diesel Gen. "B" Feed TK	+46	0/1		
		Room/328A				
RAB	16	Emergency Diesel Gen. "A" Room/221	+21	0/1		
RAB	16A	Emergency Diesel Gen. "A" Feed Tk.	+46	0/1		
		Room 328A	- 94			0/4
RAB	17	CCW Heat Exchanger "B"/236	+21			0/4
RAB	18	CCW Heat Exchanger "A"/220	+21			0/2
RAB	19	CCW Pump "A"/235	+21			0/2
RAB	20	CCW PUMP AB /239	+21			1/0
KAB	21	Corridor to CCW Pumps/218 Corridor	+21			0/39
KAD		to CCW Heat Exchangers/219 and Corridor to Emergency Diesel Gen./225A				
(1)	Common 8	Resistor Wire				
(2)	Common F	Resistor Wire				
(3)	Common F	Resistor Wire		MENDHENT	-	24 36
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# TABLE 3. 3-11 (Continued) FIRE DETECTION INSTRUMENTS

				IN	STRUMEN	12.
20	INE	ROOM NAME / NUMBER	ELEVATION	HEAT (x/y)	FLAME (x/y)	SHOKE (x/y)
1.	REACTOR	AUXILIARY BUILDING (Continued)				
RAB	25	Equip. Access Area/226 (wing area)	•22			15/0
RAB	27A	HAV ROOG/124	: :			0/16
RAB	278	Electrical Area and Health Physics Offices/122	• /			0/35
RAB	27C	ILC Room/120	+ 7			0/6
RAB	270	Communications Equip. Room/123	• 7			1/0
	11	Corridors and Passageways	- 4			0/24
~~~		Corridors on essteide	- 4			0/21
	12	Wing Area westside - Auxiliary Com-	- 25			32/0
~~~	36	popent Cooling Water Pump "A"/853	4			
		and Pine Penetration Ares/8100	- 4			
		Wing Area Center/851 and 8100	-35 4			28/0
		any area center/000 and 0100	- 4			
		Wing Area eastside-Component Cooling Water Pump "S"/853 and Pipe	- 35			31/0
		Penetration Area/8100	- 4			1.11.11.11
RAB	33	S/D Cooling Heat Exchangers AL8/820	-35			0/18
RAB	34 .	Valve Operating Enclosure Bay Room	-15.5			2/0
		Valve Operating Enclosure Bay Room	-15.5			4/0
	15	Safety Injection Pump Room 8/816	- 35			10/0
	16	Safety Injection Pump Room A/815	- 35			10/0
RAS	37	Notor-Oriven Emergency Feedpump	-35			0/1
RAB	38	Motor-Driven Emergency Feedpump	- 35			1/0
RAB	39	General Equipment Area/85, 12, 13,	- 35			0/10
		4 49 Constant Fouries Areas/85.	- 35			0/28
		1 2 1 4 19 40 41 42 44 4 4	6			
		East Corridor & General Equip. Areas	/ -35			0/15
		817, 23 6 25	- 15			4/0
		BA Hake-up Tank A-/030	- 15			4/0
	e de la la	BA Make-up Tank 5-/053A	- 15			3/0
RA	40	Diesel Storage lank Arboo	- 15			3/0
RAS	41	Diesel Storage lank 0 /054				

1.1

TOTAL NUMBER CF



# TABLE 3.3-11 (Continued) FIRE DETECTION INSTRUMENTS

			11	STRUMEN	115*
ZONE	ROOM NAME/NUMBER	ELEVATION (ft)	HEAT (x/y)	FLAME (x/y)	SMOKE (x/y)
2. REACTOR	CONTAINMENT BUILDING**				
RCB 1 RCB 2 RCB 3 RCB 4 CT 1&3 CT 2&4	Annulus/420*** Electrical Penetration Area A Electrical Penetration Area B Reactor Cable Trays Wet & Dry Cooling Tower "A" Cable Tra Wet & Dry Cooling Tower "B" Cable Tra	+46 +21 +21 +46	1/0 1/0		2/0 24/0 21/0 16/0
3. FUEL HAN	DLING BUILDING				
FHB 2	Purification Pump Room/B155, Fuel Poo Pump "A'/8157, Fuel Pool Pump "B"/ B156, Fuel Pool Heater Exchanger/ P158 and Acces Acces (P151	1 • 1			10/0
	Emergency Filter Train Unit/8152 Emergency Elect. Equip. Room/8151	: 1 : 1			6/0 1/0
4. CHARCOAL	AIR FILTER UNITS				
E-35 (3A-SA) E-35 (3B-SB) E-17 (3A-SA)	FHB Emergency Filter Train "A" FHB Emergency Filter Train "B" Shield Building Ventilation	* 1 * 1 *46	1/0 1/0 1/0		
E-17 (38-58)	Shield Building Ventilation	+46	1/0		
E-23 (3A-SA)	Controlled Ventilation Area	+46	1/0		
E-23 (3A-58)	Controlled Ventilation Area	+46	1/0		
5-8 (3A-SA)	Control Room Emergency Filter	+46	1/0		
S-8 (38-S8)	Control Room Emergency Filter Train "B"	+46	1/0		
	TABLE NOTATIONS				

\*(x/y): x is the number of Function A (early warning fire detection and nrtification only) instruments.

y is the number of Function B (actuation of fire suppression systems and early warning and notification) instruments.

\*\*The fire detection instruments located within the containment are not required to be UPERABLE during the performance of Type A containment leakage rate tests.

\*\*\*Annu'us detection is provided by smoke detectors mounted on the duct of the Annulus Negative Pressure System. This segment of duct is physically located in the RAB H&V Equipment Room (299).

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TOTAL NUMBER OF

Existing

1. 1

2. 4

3/4.7.10 FIRE SUPPRESSION SYSTEMS

FIRE SUPPRESSION WATER SYSTEM

## LIMITING CONDITION FOR OPERATION

3.7.10.1 The fire suppression water system shall be OPERABLE with:

- a. Two fire suppression pumps, each with a capacity of 2000 gpm, with their discharge aligned to the fire suppression header,
- Separate water supplies, each with a minimum contained volume of 237,000 gallons (33 feet), and
- c. An OPERABLE flow path capable of taking suction from the east fire water tank and the west fire water tank and transferring the water through distribution piping with OPERABLE sectionalizing control or isolation valves to the yard hydrant curb valves, the last valve ahead of the water flow alarm device on each sprinkler or hose standpipe, and the last valve ahead of the deluge valve on each deluge or spray system required to be OPERABLE per Specifications 3.7.10.2, 3.7.10.4, and 3.7.10.5.

APPLICABILITY: At all times.

ACTION:

- a. With one pump and/or one water supply inoperable, restore at least two pumps and/or water supplies to OPERABLE status within 7 days or provide an alternate backup pump or supply.
- b. With the fire suppression water system otherwise inoperable, establish a backup fire suppression water system within 24 hours.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.10.1.1 The fire suppression water system shall be demonstrated OPERABLE:

- a. At least once per 7 days by verifying the contained water supply volume.
- b. At least once per 31 days by starting the electric motor-driven pump and operating it for at least 15 minutes.
- c. At least once per 31 days by verifying that each valve (manual, power-operated, or automatic) in the flow path that is not locked, sealed, or otherwise secured in position is in its correct position.

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SURVEILLANCE REQUIREMENTS (Continued)

- d. At least once per 12 months by performance of a system flush.
- e. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.
- f. At least once per 18 months by performing a system functional test which includes simulated automatic actuation of the system throughout its operating sequence, and:
  - Verifying that each pump develops at least 2000 gpm at a total head of 100 psid by verifying at least 3 points on the pump performance curve during performance testing.
  - Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel, and
  - Verifying that each fire suppression pump starts (sequentially) to maintain the fire suppression water system pressure greater than or equal to 96.5 psig.
- g. At least once per 3 years by performing a flow test of the system in accordance with Chapter 5, Section 11 of the Fire Protection Handbook, 14th Edition, published by the National Fire Protection Association.

4.7.10.1.2 Each fire pump diesel engine shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying:
  - The diesel fuel oil day storage tank contains at least 170 gallons of fuel, and
  - The diesel starts from ambient conditions and operates for at least 30 minutes.
- b. At least once per 92 days by verifying that a sample of diesel fuel from the fuel storage tank, obtained in accordance with ASTM-D270-75, is within the acceptable limits specified in Table 1 of ASTM D975-77 when checked for viscosity, water and sediment.
- c. At least once per 18 months during shutdown, by subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for the class of service.

4.4

# Existing

# SURVEILLANCE REQUIREMENTS (Continued)

4.7.10.1.3 Each fire pump diesel starting 12-volt battery bank and charger shall be demonstrated OPERABLE.

- a. At least once per 7 days by verifying that:
  - 1. The electrolyte level of each battery is above the plates, and
  - The overall battery voltage is greater than or equal to 12 volts.
- b. At least once per 92 days by verifying that the specific gravity ic appropriate for continued service of the battery.
- c. At least once per 18 months by verifying that:
  - The batteries and battery racks show no visual indication of physical damage or abnormal deterioration, and.
  - The battery-to-battery and terminal connections are clean, tight, free of corrosion, and coated with anticorrosion material.

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Existing

SPRAY AND/OR SPRINKLER SYSTEMS

. 1

LIMITING CONDITION FOR OPERATION

3.7.10.2 The following spray and/or sprinkler systems shall be OPERABLE:

Sorinkler No.	Bldg./Elev.	Location
EBW-J	RCB	Reactor Coolant Pumps 1A, 1B
FPM-2	RCB	Reactor Coolant Pump 2A, 28
FPM-3A	RAB +21, +46	Diesel Generator Area A. Feed Tank Room A
FPM-48	RAB +21, +46	Diesel Generator Area B. Feed Tank Room B
FPM-11A	RA8 -35	Emergency D/G Fuel Oil Tank A
FFMTLE	nnu *30	Emergency D/G Fuel Oil Tank B
FPM-16	FWPH +15	Fire Water Pump House
FPM-17	RA6 +35	Cable Vault Area
FPM-18	RA8 +35	Electrical Penetration Area 1
FPM-19	RAB +35	Electrical Penetration Area 2
FPM-22	RAB -4	Corridor and Blowdown Tank Rooms
FPM-23	RAB -35	Corridor Shutdown Hest Exchanger Poons
		EFW Pump Room
FPM-24	RA8 +21	Corridors, CCW Area
FON-259	PAP +21	North High Voltage Switchgear Room
FPM-26	RA8 +46	Ventilation Equipment Rooms
FPM-27	RAB +7	HVAC Rooms
FPM-28	RAE - 35	Auxiliary Component Cooling Water Pump Poom
FPM-29	RA8 +35	Relay Room Corridor
FDM- 30A	RAR +21	South High Valtage Switchgeen Boom
FPM-33	RAB +46	F=17(3A-SA) Shiaid Ruilding Ventilation
	they have	Suctom Filter Train & Charges & Adenthan
FDM-34	RAR +46	F=17(3R-SR) Shield Ruilding Vestilation
		Suctam Filtan Train & Chappenel Advantage
FPM-36	RA8 +45	F=23(3A=SA) Controlled Ventilation Area
		Sustam Filtar, Train & Chargoal Adsorban
FPM-37	RAE +46	E=23(38-S8) Controlled Ventilation Area
		System Filter Train & Charcoal Advantage
		states intering and sold and a sold the

APPLICABILITY: Whenever equipment protected by the spray/sprinkler system is required to be OPERABLE.

- ACTION
  - a. With one or more of the above required spray and/or sprinkler systems inoperable, within 1 hour establish a continuous fire watch with backup fire suppression equipment for those areas in which redundant systems or components could be damaged unless the spray and/or sprinkler system(s) is located inside the containment, then inspect that containment area at least once per 8 hours or monitor air temperature at least once per hour at the locations listed in Specification 4.6.1.5; for other areas, establish an hourly fire watch patrol.
  - b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

WATERFORD - UNIT 3

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Amendment No. 28

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Existing

# SURVEILLANCE REQUIREMENTS

4.7.10.2 Each of the above required spray and/or sprinkler systems shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying that each valve (manual, power-operated, or automatic) in the flow path that is not locked, sealed, or otherwise secured in position is in its correct position.
- b. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.
- c. At least once per 18 months:
  - By performing a system functional test which includes simulated automatic actuation of the system, and:
    - a) Verifying that the automatic valves in the flow path actuate to their correct positions on a thermal/preaction test signal, and
    - b) Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel.
  - By a visual inspection of the dry pipe spray and sprinkler headers to verify their integrity, and
  - By a visual inspection of each nozzle's spray area to verify the spray pattern is not obstructed.
- d. At least once per 3 years by performing an air flow test through each open head spray and sprinkler header\* system listed in Section 3.7.10.2 and verifying the spray nozzles are unobstructed.

\*In lieu of an air flow test, the charcoal filter system spray nozzles need only be visually inspected and verified to be unobstructed each time the charcoal is changed.

WATERFORD - UNIT 3

Amendment No. 28

Existing

5 4

LIMITING CONDITION FOR OPERATION

3.7.10.3 The computer room Halon system shall be OPERABLE.

APPLICABILITY: whenever equipment protected by the Halon system is required to be OPERABLE.

ACTION:

- a. with the above required Halon system inoperable, within 1 hour establish an hourly fire watch patrol.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

# 7.3^ 3 The above required Halon system shall be demonstrated - OPERABLE:

- a. At least once per 31 days by verifying that each valve (manual, power-operated, or automatic) in the flow path is in its correct position.
- b. At least once per 6 months by verifying Halon storage tank weight to be at least 95% of full charge weight (level) and pressure to be at lesst 90% of full charge pressure.
- c. At least once per 18 months by verifying:
  - The system, including associated ventilation dampers and fire door release mechanisms, actuates manually and automatically, upon receipt of a simulated test signal, and
  - Performance of a flow test through headers and nozzles to assure no blockage.

WATERFORD - UNIT 3

3/4 7-34

Existing

FIRE HOSE STATIONS

LIMITING CONDITION FOR OPERATION

3.7.10.4 The fire nose stations shown in Table 3.7-4 shall be OPERABLE.

APPLICABILITY: Whenever equipment in the areas protected by the fire hose stations i required to be OPERABLE.

ACTION:

- a. With one or more of the fire hose stations shown in Table 3.7-4 inoperable, provide gated wye(s) on the nearest operable hose station(s). One outlet of the wye shall be connected to the standard length of hose provided for the hose station. The second outlet of the wye shall be connected to a length of hose sufficient to provide coverage for the area left unprotected by the inoperable hose station. Where it can be demonstrated that the physical routing of the fire hose would result in a recognizable hazard to operating technicians, plant equipment, or the hose itself, the fire hose shall be stored in a roll at the outlet of the operable hose station. Signs shall be mounted above the gated wye(s) to identify the proper hose to use. The above action shall be accomplished within 1 hour if the inoperable fire hose is the primary means of fire suppression; otherwise, route the additional hose within 24 hours.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

### SURVEILLANCE REQUIREMENTS

4.7.10.4 Each of the fire hose stations shown in Table 3.7-4 shall be demonstrated OPERABLE:

- a. At least once per 31 days by visual inspection of the stations accessible during plant operation to assure all required equipment is at the station.
- b. At least once per 18 months by:
  - Visual inspection of the stations not accessible during plant operations to assure all required equipment is at the station.
  - 2. Removing the hose for inspection and reracking, and
  - Inspecting all gaskets and replacing any degraded gaskets in the couplings.

Existing

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# SURVEILLANCE REQUIREMENTS (Continued)

- c. At least once per 3 years by:
  - Partially opening each hose station valve to verify valve OPERABILITY and no flow blockage.
  - Conducting a hose hydrostatic test at a pressure of 150 psig or at least 50 psig above maximum fire main operating pressure, whichever is greater.

Existing

TABLE 3.7-4

FIRE HOSE STATIONS

LOCATION BLDG/COLUMN		ELEVATION (Feet MSL)	HOSE RACK IDENTIFICATION		
FHR	2FH-U	- 35	FH/A-010		
FHB	3FH-V	+1	FH/A-020		
FHB	SFH-V	+1	FH/A-021		
FHB	2FH-T	+21	FH/A-040		
FHB	2FH-V	+18	FH/A-041		
FHB	Escape Exit	+21	FH/A-043		
FHB	6FH-W	+18	FH/A-042		
FHB	254-T	+46	FH/A-030		
FHB	7FH-W -	+46	FH/A=031		
RAR	J-9A	+ 35	RA/F-101		
RAB	J-6A	- 35	RA/F=102		
RAB	H=4A	-35	RA/F-103		
RAB	J=3A	- 35	RA/F=104		
RAB	K-4A	+35	RA/F=105		
RAB	M-10AZ	- 35	RA/C-106		
RAB	M- 3A	*35	RA/A-107		
RAB	M-2AC	- 20	RA/K-108		
RAS	M-11AZ	-20	RA/L-109		
RAB	K=10A	- 35	RA/F-110		
RAB	K-11A	-4	RA/D-201		
RAB	H-11A	-4	RA/D-202		
RAB	J-10A	- 4	RA/E-203		
RAB	J-8A	-4	RA/H=204		
RAB	H=4A	- 4	RA/1-205		
RAB	K-4A	-4	RA/J-206		
RAB	M-10AZ	- 4	RA/C-207		
RAB	M-3A	+4	RA/A-208		
RAB	LY-8A	-4	RA/8-209		
RAB	K12A	*7	RA/D-301		
RAB	J11A	*7	RA/0-302		
RAB	H-11A	*21	RA/E-401		
RAP	H-9A	+21	RA/E-402		
RAB	K-11A	+21	RA/0-403		
RAB	L-7A	+21	RA/C-411		
RAB	N-10AZ	*21	RA/C-405		
RAB	J=6A	*21	RA/1-406		
RAB	H-4A	+21	RA/I-407		
RAS	J-1A	*21	RA/I-408		
RAB	K=4A	*21	RA/J-409		
RAB	L=7A	*21	RA/G-410		
RAB	N=4A	*21	RA/A=+12		
RAB	L=2A	*21	RA/A-413		
RAB	H=12A	*35	RA/E-501		
RAB	K-11A	+35	RA/E-302		
RAB	N=10AZ	+35	RA/C-503		
RAB	Northeast Stair	wei1+21	RA/C+404		

WATERFORD - UNIT 3

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Existing

# TABLE 3.7-4 (Continued)

FIRE HOSE STATIONS

LOCAT BLDG/	COLUMN	ELEVATION (Feet MSL)	HOSE RACK IDENTIFICATION
RAB	H-10A	+35	RA/E-504
RAB	K-9A	+35	RA/E-505
RAB	L=9A	+35	RA/C-506
RAB	LY+6A	+35	RA/A-507
RAB	J-9A	+35	RA/E-508
RAB	L-SA	+35	RA/E-509
RAB	G-9A	+35	RA/E-510
RAB	J=12A	+46	RA/E-601
RAB	K-11A	+46	RA/G-602
RAB	K-10A	+46	RA/G-603
RAB	K-8A	+46	RA/G-604
RAB	G-7A	+46	RA/G-605
RAB	K-6A	+46	RA/J-606
RAB	K=2A	+46	RA/J-607
RAB	J-2A	+46	RA/J-608
RAB	J=3A	+46	RA/J-609
RAB	K-2A	+69	RA/J-701
*RCB	19	-4	R/A-201
*RCB	12	-4	R/A-202
*RCB	6	+4	R/B-203
*RCB	î	- 4	R/B-204
*RCB	20	+21	R/A-401
*808	13	+21	R/A-402
*RCB	7	+21	R/B=403
* 208	1	*21	R/8-404
*RCB	13	+35	R/A-502
*808	20	+46	R/A-601
*RCR	13	+46	R/A-602
*RCB	7	+46	R/8-603
*808	2	+46	R/8-604

\*Indicates all hose stations not accessible during plant operations and shall be demonstrated operable at 'east once per 18 months.

WATERFORD - UNIT 3

6 a 1 1 4

Existing

YARD FIRE HYDRANTS AND HYDRANT HOSE HOUSES

#### LIMITING CONDITION FOR OPERATION

3.7.10.5 The yard fire hydrants and associated hydrant hose houses shown in Table 3.7-5 shall te OPERABLE.

APPLICABILITY: Whenever equipment in the areas protected by the yard fire hydrants is required to be OPERABLE.

### ACTION:

- a. With one or more of the yard fire hydrants or associated hydrant hose houses shown in Table 3.7-5 inoperable, within 1 hour have sufficient additional lengths of 2-1/2-inch diameter hose located in an adjacent OPERABLE hydrant hose house to provide service to the unprotected area(s) if the inoperable fire hose is the primary means of fire suppression; otherwise, provide the additional hose within 24 hours.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

### SURVEILLANCE REQUIREMENTS

4.7.10.5 Each of the yard fire hydrants and associated hydrant hose houses shown in Table 3.7-5 shall be demonstrated OPERABLE:

- a. At least once per 31 days by visual inspection of the hydrant hose house to assure all required equipment is at the hose house.
- b. At least once per 12 months by:
  - Conducting a hose hydrostatic test at a pressure of 150 psig or at least 50 psig above maximum fire main operating pressure, whichever is greater.
  - Inspecting all the gaskets and replacing any degraded gaskets in the couplings.
  - Performing a flow check of each hydrant to verify its OPERABILITY.
  - Visually inspecting each yard fire hydrant and verifying that the hydrant barrel and the hydrant are not damaged.

Existing

# TABLE 3.7-5

YARD FIRE HYDRANTS AND ASSOCIATED HYDRANT HOSE HOUSES

LOCATION	HYDRANT NUMBER
Northeast Side RAB	4
Northeast Corner FHB	6
Northwest Corner FHB	7
Northeast Corner Service Building	9

EXISTIN

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3/4.7.11 FIRE RATED ASSEMBLIES

### LIMITING CONDITION FOR OPERATION

3.7.11 All fire rated assemblies (walls, floor/ceilings, cable tray enclosures, and other fire barriers) separating safety-related fire areas or separating portions of redundant systems important to safe shutdown within a fire area and all sealing devices in fire rated assembly penetrations (fire doors, fire windows, fire dampers, cable, piping, and ventilation duct penetration seals) shall be OPERABLE.

APPLICABILITY: At all times.

### ACTION:

- a. With one or more of the above required fire rated assemblies and/or sealing devices inoperable, within 1 hour either establish a continuous fire watch on at least one side of the affected assembly, or verify the OPERABILITY of the fire detectors on at least one side of the inoperable assembly and establish an hourly fire watch patrol.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.11.1 At least or :e per 18 months the above required fire rated assemblies and penetration sealing devices other than fire doors shall be verified OPERABLE by:

- Performing a visual inspection of the exposed surfaces of each fire rated assembly.
- Performing a visual inspection of each fire window/fire damper/ and associated hardware.
- c. Performing a visual inspection of at least 10% of each type of sealed penetration. If apparent changes in appearance or abnormal degradations are found, a visual inspection of an additional 10% of each type of sealed penetration shall be made. This inspection process shall continue until a 10% sample with no apparent changes in appearance or abnormal degradation is found. Samples shall be selected such that each perstration seal will be inspected at least once per 15 years.



SURVEILLANCE REQUIREMENTS (Continued)

4.7.11.2 Each of the above required fire doors shall be verified OPERABLE by inspecting the automatic hold-open, release, and closing mechanism and latches at least once per 6 months, and by verifying:

- a. The OPERABILITY of the fire door supervision system for each electrically supervised fire door by performing a CHANNEL FUNCTIONAL TEST at least once per 31 days.
- b. That each locked-closed fire door is closed at least once per 7 days.
- c. That doors with automatic hold-open and release mechanisms are free of obstructions at least once per 24 hours and performing a functional test of these mechanisms at least once per 18 months.

d. That each unlocked fire door without electrical supervision is closed at least once per 24 hours.

1

# INSTRUMENTATION

### BASES

for the system is thus based on testing and operating experience, and the setpoint is set at the lowest achievable IDLH gas concentration providing reliable operation and the optimum detection of toxic gases. The setpoint is therefore subject to change wherein necessitated by operating experience such as a result of changes in the Waterford 3 area c'amical atmospheric profile. The setpoint is established and controlled by procedure.

EXIST

# 3/4.3.3.8 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.

## 3/4.3.3.9 LOOSE-PART DETECTION INSTRUMENTATION

The OPERABILITY of the loose-part detection instrumentation ensures that sufficient capability is available to detect loose metallic parts in the primary system and avoid or mitigate damage to primary system components. The allowable out-of-service times and Surveillance Requirements are consistent with the recommendations of Regulatory Guide 1.133, "Loose-Part Detection Program for the Primary System of Light-Water-Cooled Reactors," May 1981.

Existina

#### BASES

## 3/4.7.9 SEALED SOURCE CONTAMINATION

The limitations on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 70.39(c) limits for plutonium. This limitation will ensure that leakage from byproduct, source, and special nuclear material sources will not exceed allowable intake values.

Sealed sources are classified into three groups according to their use, with Surveillance Requirements commensurate with the probability of damage to a source in that group. Those sources which are frequently handled are required to be tested more often than those which are not. Sealed sources which are continuously enclosed within a shielded mechanism (i.e. sealed sources within radiation monitoring or boron measuring devices) are considered to be stored and need not be tested unless they are removed from the shield mechanism.

# 3/4.7.10 FIRE SUPPRESSION SYSTEMS

The OPERABILITY of the fire suppression systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety-related equipment is located. The fire suppression system consists of the water system, spray and/or sprinklers, Halon, fire hose stations, and yard fire hydrants. The collective capability of the fire suppression systems is adequate to minimize potential damage to safety-related equipment and is a major element in the facility fire protection program.

In the event that portions of the fire suppression systems are inoperable, alternate backup fire fighting equipment is required to be made available in the affected areas until the inoperable equipment is restored to service. When the inoperable fire fighting equipment is intended for use as a backup means of fire suppression, a longer period of time is allowed to provide an alternate means of fire fighting than if the inoperable equipment is the primary means of fire suppression.

The Surveillance Requirements provide assurance that the minimum OPERABILITY requirements of the fire suppression systems are met. An allowance is made for ensuring a sufficient volume of Halon in the Halon storage tanks by verifying either the weight or the level of the tanks. Level measurements are made by either a U.L. or F.M. approved method.

In the event the fire suppression water system becomes inoperable, immediate corrective measures must be taken since this system provides the major fire suppression capability of the plant.

Existing

BASES

# 3/4.7.11 FIRE RATED ASSEMBLIES

The OPERABILITY of the fire barriers and barrier penetrations ensure that fire damage will be limited. These design features minimize the possibility of a single fire involving more than one fire area prior to detection and extinguishment. The fire barriers, fire barrier penetrations for conduits, cable trays and piping, fire windows, fire dampers, and fire doors are periodically inspected to verify their OPERABILITY.

### 3/4.7.12 ESSENTIAL SERVICES CHILLED WATER SYSTEM

The OPERABILITY of the essential services chilled water system ensures that sufficient chilled water is supplied to those air handling systems which cool spaces containing equipment required for safety-related operations and, during normal plant operation, the nonessential spaces.

# UNIT STAFF (Continued)

b. At least one licensed Operator shall be in the control room when fuel is in the reactor. In addition, while the reactor is in MODE 1, 2, 3, or 4, at least one licensed Senior Operator shall be in the control room.

Existing

- A Health Physics Technician\* shall be on site when fuel is in the reactor;
- d. All CORE ALTERATIONS shall be observed and directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.
- e. A site fire brigade of at least five members shall be maintained on site at all times.\* The fire brigade shall not include the Shift Supervisor, the Shift Technical Advisor, nor the two other members of the minimum shift crew necessary for safe shutdown of the unit and any personnel required for other essential functions during a fire amergency.
- f. Administrative procedures shall be developed and implemented to limit the working hours of individuals of the nuclear power plant operating staff who are responsible for manipulating plant controls or for adjusting on-line systems and equipment affecting plant safety which would have an immediate impact on public health and safety.

Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a normal 8-hour day, 40-hour week while the plant is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, the following guidelines shall be followed:

- An individual shall not be permitted to work more than 16 hours straight, excluding shift turnover time.
- An individual shall not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any 7-day period, all excluding shift turnover time.
- A break of at least 8 hours shall be allowed between work periods, including shift turnover time.

<sup>\*</sup>The Health Physics Technician and fire brigade composition may be less than the minimum requirements for a period of time not to exceed 2 hours, in order to accommodate unexpected absence, provided immediate action is taken to fill the required positions.

Existing

# UNIT STAFF (Continued)

 Except during extended shutdown periods, the use of overtime shall be considered on an individual basis and not for the entire staff on a shift.

Any deviation from the above guidelines shall be authorized by the Plant Manager, the assistant Plant Managers, the Operations Superintendent or higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation. Controls shall be included in the procedures such that individual overtime will be reviewed monthly by the Plant Manager or his designee to assure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

g. The Operations Superintendent shall hold a senior reactor operator license.

Existing

### RESPONSIBILITIES (Continued)

- Review of unit operations to detect potential hazards to nuclear safety.
- h. Performance of special reviews, investigations, or analyses and reports thereon as requested by the Plant Manager or the Safety Review Committee.
- Review of the Security Plan and implementing procedures and submittal of recommended changes to the Safety Review Committee.
- j. Review of the Emergency Plan and implementing procedures and submittal of recommended changes to the Safety Review Committee.
- k. Review and documentation of judgment concerning prolonged operation in bypass, channel trip, and/or repair of defective protection channels of process variables placed in bypass since the last PORC meeting.
- Review of proposed modifications to the CPC addressable constants based on information obtained through the Plant Computer-CPC data link.
- m. Review of any accidental, unplanned or uncontrolled radioactive release including reports covering svaluation, recommendations and disposition of the corrective action to prevent recurrence and the forwarding of these reports to the Vice President-Nuclear and to the Safety Review Committee.
- n. Review of changes to the PROCESS CONTROL PROGRAM and the OFFSITE DOSE CALCULATION MANUAL, and major changes to radwaste treatment systems.

### AUTHORITY

6.5.1.7 The PORC shall:

- a. Recommend in writing to the Plant Manager, prior to implementation except as provided in Specification 6.8.3, approval or disapproval of items considered under Specification 6.5.1.6a. through d. and 1.
- b. Render determinations in writing, prior to implementation except as provided in Specification 6.8.3, with regard to whether or not each item considered under Specification 6.5.1.6a. through e. constitutes an unreviewed safety question.
- c. Provide written notification within 24 hours to the Vice President-Nuclear and the Safety Review Committee of disagreements between the PORC and the Plant Manager; however, the Plant Manager shall have responsibility for resolution of such disagreements pursuant to Specification 6.1.1.

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ATTACHMENT B

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# 9. Fire Protection (Section 9.5.1, SSER 8) (Implement and

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deletera. The licensee shall maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility through Amendment 36 and as approved in the SER through Supplement 9, subject to provisions b & c below. the following provision:

- . The licensee may make no change to features of the approved fire protection program which would decrease the level of fire protection in the plant without prior approval of the Commission. To make such a change the licensee must submit an application for license amendment pursuant to 10 CFR 50.90.
- c. The licensee may make changes to features of the approved fire protection program which do not decrease the level of fire protection without prior Commission approval, provided:
  - such changes do not otherwise involve a change in a license condition or technical specification or result in an unreviewed safety question (see 10 CFR 50.59).
  - (2) such changes do not result in failure to complete the fire protection program approved by the Commission prior to license issuance.

The licensee shall maintain, in an auditable form, a current record of all such changes including an analysis of the effects of the change on the fire protection program and shall make such records available to NRC inspectors upon request. All changes to the approved program made without prior Commission approval shall be reported annually to the Director of the Office of Nuclear Reactor Regulation, together with supporting analyses.

- d. The licensee shall provide smoke detectors in the Control Room main control panels, which are installed in accordance with NFPA 72E, prior to startup following the first refueling outage.
- e. The licensee shall complete modifications resulting from its spurious signal analysis prior to startup following the first refueling outage, but in any case not later than June 1, 1987.

The license may make changes to the approved fire protection program without perce appine of the Commession only 18 those changes would not advectly asset the ability to achieve and maintain sale shutdown in the event of a free.

- f. The licensee shall provide neutron flux indication at LCP-43 which is electrically independent of the control room and cable vault prior to start-up following the first refueling outage, but in any case not later than June 1, 1987.
- g. The licensee shall provide a continuous fire watch in the relay room at the isolation panel from initial criticality until acceptable resolution of adverse effects, if any, of the loss of this panel on safe shutdown.

# 10. Post-Fuel-Loading Initial Test Program (Section 14, SSER 10)

Any changes to the Initial Test Program described in Section 14 of the FSAR made in accordance with the provisions of 10 CFR 50.59 shall be reported in accordance with 50.59(b) within one month of such change.

# 11. Emergency Response Capabilities (Section 22, SSER 8)

The licensee shall comply with the requirements of Supplement 1 to NUREG-0737 for the conduct of a Detailed Control Room Design Peview (DCRDR). Prior to May 1, 1985, the licensee shall submit for staff review and approval the DCRDR Summary Report, including a description of the process used in carrying out the function and task analysis performed as a part of both the DCRDR and the Procedures Generation Package efforts.

# 12. Reactor Coolant System (RCS) Depressurization Capability (Section 5.4.3, SSER 8)

By June 18, 1985, the licensee shall submit the results of confirmatory tests regarding the depressurization capability of the auxiliary pressurizer spray (APS) system. This information must demonstrate that the APS system can perform the necessary depressurization to meet the steam generator single-tube rupture accident acceptance criteria (SRP 15.6.3) with loop charging isolation valve failed open. Should the test results fail to demonstrate that the acceptance criteria are met, the licensee must provide for staff review and approval, justification for interim operation, and a schedule for corrective actions.

# 13. Response to Salem ATWS Event (Section 7.2.9, SSER 8)

The licensee shall submit responses and implement the requirements of Generic Letter 83-28 on a schedule which is consistent with that given in the licensee's letter of May 30, 1984.



LIMITING CONDITION FOR OPERATION AND SURVEILLANCE REQUIREMENTS

# SECTION

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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 3.3-11 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 except for the annulus, restore the inoperable instrument(s) to OPER-ABLE 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 air temperature at least once per hour at the locations listed in Specification 4.6.1.5.
- b. With more than one-half of the Function A fire detection instruments in any fire zone shown in Table 3.3-11 inoperable except for the annulus, 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 air temperature at least once per hour at the locations listed in Specification 4.6.1.5.
- c. With both annulus detection instruments inoperable, restore at least 1 detector to operable status or within the next 1 hour establish a fire watch patrol to inspect the zone at least once per eight hours.\*
- d. The provisions of Specification 3.0.3 and 3.0.4 are not applicable.

# SURVEILLANCE REQUIREMENTS

4.3.3.8.1 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 CHANNEL FUNCTIONAL TEST. Fire detectors which are not accessible during plant operation shall be demonstrated OPERABLE by the performance of a CHANNEL FUNCTIONAL TEST during each COLD SHUTDOWN exceeding 24 hours unless performed in the previous 6 months.

4.3.3.8.2 The NFPA Standard 72D supervised circuits supervision associated with the detector alarms of each of the above required fire detection instruments which are accessible during plant operation shall be demonstrated OPERABLE at least once per 6 months. Circuits which are not accessible during plant operation shall be demonstrated OPERABLE at tion shall be demonstrated OPERABLE during each COLD SHUTDOWN exceeding 24 hours unless performed in the previous 6 months.

Fire watch patrol may be temporarily suspended during performance of Specification 4.6.6.1.a.

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INSTRUMENTATION

FIRE DETECTION INSTRUMENTATION

SURVEILLANCE REQUIREMENTS (Continued)

4.3.3.8.3 The nonsupervised circuits associated with detector alarms between the instrument and the control room shall be demonstrated OPERABLE at least once per 31 days.

4.3.3.8.4 Each of the resistor wires required by Table 3.3-11 shall be demonstrated OPERABLE at least once per 6 months by verifying the proper wire pesistance.

Proposed

TABLE 3. 3-11 FIRE DETECTION INSTRUMENTS

CONE     ROOM NAME/NUMBER     ELEVATION     HEAT     FLAME     Stress       1.     REACTOR AUXILIARY BUILDING     (ft)     (IZ/Y)						TOTA	L NUMBE	R OF
1. REACTOR AUXILIARY BUILDING RAB 1A Main Control Panels 1,2,3,4,6,7,8,35,36 +46 10/ RAB 1A Control Room Proper/304 +46 20/ RAB 1B Emergency Equip. M&V Room/314 +46 20/ RAB 1D Computer Room (below raised floor)/306 +46 0/ RAB 1D Computer Room (below raised floor)/306 +46 0/ RAB 2 Ventilation Equip. Room/299 +46 0/ RAB 3 RAB Corridor to Relay Room/261 +35 0/1(3) 4/ RAB 3A RAB BAttery Exhaust Fan Room/261 +35 0/1(3) 4/ RAB 4 Cable Vault/260 A relay Room/233 +46 0/ RAB 5 Electrical Penetration Area "A"/263 +35 0/ RAB 5 Electrical Penetration Area "B"/263A +35 0/ RAB 6 Electrical Penetration Area "B"/263A +35 0/ RAB 7 Relay Room/262 153 (3) 122 RAB 8A High Voltage Switchgear Room "A"/212A +21 0/1(1) 18/ RAB 8B Electrical Equip. Room/235 and High +21 0/1(2) 28/ Voltage Switchgear Room "B"/212 +21 0/1(1) 18/ RAB 8B Electrical Equip. Room/217 + +21 0/1(2) 28/ Voltage Switchgear Room #10/212 + 21 0/1(2) 28/ RAB 8C High Voltage Switchgear Room +21 (1) 8/ RAB 8B Electrical Equip. Room/217 + +21 0/ RAB 1B Battery Room "B"/213 +21 0/1(2) 28/ RAB 11 Battery Room "A"/214 +21 0/1(2) 28/ RAB 12 Battery Room "B"/213 +21 0/1 RAB 13 Battery Room "A"/214 +21 0/1 RAB 14 Emergency Diesel Gen. "B" Room/222 +21 0/1 RAB 15 Emergency Diesel Gen. "B" Room/222 +21 0/1 RAB 16 Emergency Diesel Gen. "B" Room/221 +21 0/1 RAB 18 CCW Heat Exchanger "B"/236 +21 0/1 RAB 19 CCW Pump "B"/235 +21 0/1 RAB 19 CCW Pump "B"/235 +21 0/1 RAB 19 CCW Pump "B"/236 +21 0/1 RAB 19 CCW Pump "B"/236 +21 0/1 RAB 19 CCW Pump "B"/236 +21 0/1 RAB 23 Corridor to Emergency Diesel Gen. "A" Room/221 +21 0/1 RAB 23 Corridor to Emergency Diesel Gen. "A" Room/221 +21 0/1 RAB 23 Corridor to Emergency Diesel Gen. "A" Room/221 +21 0/1 RAB 23 Corridor to Emergency Diesel Gen. "A" Room/221 +21 0/1 RAB 23 Corridor to Emergency Diesel Gen. "A" Room/221 +21 0/1 RAB 23 Corridor to Emergency Diesel Gen. "A" Room/221 +21 0/1 RAB 23 Corridor to Emergency Diesel Gen. "A" Room/221 +21 0/1 RAB 23 Corridor to Emergency Diesel Gen. "A" Room/215 +21	V	ONE	ROOM NAME/NUMB	ER	ELEVATION (ft)	HEAT	FLAME (X/Y)	SMOKE (X/Y)
RAB IA RAB IA Control Room Proper/304   *46 *46 *46 *46 *46 *46 *46 *46 *46 *46	1.	REACTOR	R AUXILIARY BUILDING	3 .			/	
RAB 1A RAB 1B RAB 1B Control Room Proper/304   +46 Computer Room (above raised floor)/305 +46 Computer Room (below raised floor)/305 +46 Computer Room Resistor Wire (3)Common	RAB	14	Main Control Pane	els 1,2,3,4,6,7,8,35,	36 +46	/		10/0
RAB 1B   Chempency Equip. H&V Room/314   +46   0/     RAB 1D   Computer Room (above raised floor)/306   +46   0/     RAB 2   VentTiAtion Equip. Room/299   +46   0/     RAB 3   RAB Corridor to Relay Room/261   +35   0/1(3)   4/     RAB 3   RAB Corridor to Relay Room/261   +35   0/1(3)   4/     RAB 4   Cable Vault/260   +46   0/     RAB 4   Cable Vault/260   +35   0/     RAB 5   Electrical Penetration Area "A"/263   +35   0/     RAB 6   Electrical Penetration Area "B"/263A   +35   0/     RAB 7   Relay Room/262   +35   0/     RAB 7   Relay Room/262   +35   0/     RAB 7   Relay Room/262   +35   0/     RAB 8   Electrical Penetration Area "B"/263A   +35   0/     RAB 7   Relay Room/261   +35   0/   2/     RAB 8   Electrical Equip. Room/217   +21   0/1(2)   28/     Voltage Switchgear Room "B"/213   +21   21   21   21     RAB 8	RAB	14	Control Room Prop	per/304	+46	1		20/0
RAB 1D   Computer Room (above raised floor)/305 +46   Gomputer Room (below raised floor)/305 +46   Gomputer Room (below raised floor)/305 +46     RAB 2   Ventilation Equip. Room/299   +46   GO     RAB 3   RAB Corridor to Relay Room/201   +35   O/1(3)   4/     RAB 4   Cable Vaul/260   +35   GO   GO     RAB 4   Cable Vaul/260   +35   GO   GO     RAB 5   Electrical Penetration Area "A"/263   +35   GO     RAB 6   Electrical Penetration Area "B"/263   +35   GO     RAB 7   Relay Room/262   +35   GO   GO     RAB 8   Electrical Penetration Area "B"/263   +35   GO   GO     RAB 8   Electrical Penetration Area "B"/263   +35   GO   GO     RAB 8   Flectrical Penetration Area "B"/263   +35   GO   GO     RAB 8   Flectrical Penetration Area "B"/263   +35   GO   GO     RAB 8   Flectrical Equip. Room/215   +35   GO   GO </td <td>RAB</td> <td>18</td> <td>Emergency Equip.</td> <td>H&amp;V Room/314</td> <td>+46</td> <td>1</td> <td></td> <td>0/12</td>	RAB	18	Emergency Equip.	H&V Room/314	+46	1		0/12
Computer Room (Delow raised floor)/205 *46 0/ RAB 2 Ventifation Equip. Room/291 *46 0/ RAB 3 RAB Corridor to Relay Room/261 *35 0/1(3) 4/ RAB 3A RAB Battery. Exhaust Fan Room/406 *69 0/ RAB 4 Cable Vault/260 *35 0/ RAB 5 Electrical Penetration Area "A"/263 *35 0/ RAB 6 Electrical Penetration Area "B"/263 *35 0/ RAB 7 Relay Room/262 *35 0/ RAB 8 High Voltage Switchgear Room "A"/212A *21 0/1(1) 18/ RAB 98 Electrical Equip. Room/2158 and High *21 0/1(2) 28/ Voltage Switchgear Room "B"/212 *21 0/1(1) 18/ RAB 88 EC ELA High Voltage Switchgear Room "B"/212 *21 0/1(2) 28/ Voltage Switchgear Room "B"/212 *21 0/1(2) 28/ Voltage Switchgear Room *27 *21 0/1(1) 18/ RAB 88 ELectrical Equip. Room/216 * *21 0/1(2) 28/ Voltage Switchgear Room *2/21 *21 0/1(2) 28/ RAB 88 E CEA M/Gister Room/216 * *21 0/1(2) 28/ RAB 81 Battery Room "B"/214 *21 0/1(2) 28/ RAB 13 Battery Room "B"/214 *21 0/1(2) 28/ RAB 13 Battery Room "B"/214 *21 0/1(2) 28/ RAB 15 Emergency Diesel Gen. "B" Feed TK *46 0/1 Room/328A *21 0/1 RAB 15 Emergency Diesel Gen. "A" Room/221 *21 0/1 RAB 16 Emergency Diesel Gen. "A" Room/221 *21 0/1 RAB 17 CCW Heat Exchanger "A"/220 *21 0/1 RAB 18 CCW Pump "A"/234 *21 0/1 RAB 20 CCW Pump "A"/234 *21 0/1 RAB 21 CCW Pump "A"/234 *21 0/1 RAB 23 Corridor to CCW Pumps/218, Corridor *21 0/1 RAB 23 Corridor to CCW Pumps/218, Corridor *21 0/1 RAB 23 Corridor to Emergency Diesel Gen. "A" Room/221 *21 0/1 RAB 23 Corridor to Emergency Diesel Gen. "A" Sol 24 0/1 RAB 23 Corridor to Emergency Diesel Gen. "A" Sol 24 0/1 RAB 23 Corridor to Emergency Diesel Gen. "A" Sol 24 0/1 RAB 24 Corridor to Emergency Die	RAB	10	Computer Room (al	bove raised floor)/30	6 +46	1		5/0
RAB 2   Ventilation Equip. Room/251   *35   0/1(3)   44     RAB 3   RAB Excertical Corridor to Relay Room/251   *35   0/1(3)   44     RAB 4   Cable Vault/260   *35   0/1(3)   44     RAB 4   Cable Vault/260   *35   0/1(3)   44     RAB 5   Electrical Penetration Area "A"/263   *35   0/0     RAB 6   Electrical Penetration Area "B"/263A   *35   0/1(1)     RAB 7   Relay Room/262   *35   0/1(1)   18     RAB 7   Relay Room/262   *35   0/1(1)   18     RAB 8   Electrical Equip. Room/258 and High *21   0/1(1)   18     RAB 88   Electrical Equip. Room/258 and High *21   0/1(2)   28     Voltage Switchgear Room "A"/212A *21   0/1(2)   28     Voltage Switchgear Room "B"/212   *21   21   22     RAB 80   Electrical Equip. Room/216   *21   21   22     RAB 81   Battery Room "B"/213   *21   21   22     RAB 12   Battery Room "A"/214   *21   22   24     RAB 13   Battery Ro			Computer Room (be	elow raised floor)/30	5 +40	/		0/25
RAB 3   RAB Corrigor to kelay Room/201   735   074(3)     RAB 3A   RAB BAtCery, Exhaust Fan Room/406   735   074(3)     RAB 4   Cable Vault/260   735   074(3)     RAB 5   Electrical Penetration Area "A"/263   735   074(3)     RAB 6   Electrical Penetration Area "A"/263   735   074(3)     RAB 7   Relay Room/262   *35   074(3)     RAB 7   Relay Room/262   *35   074(3)     RAB 7   Relay Room/262   *35   074(3)     RAB 8   Electrical Penetration Area "A"/263   *35   074(3)     RAB 8   Electrical Penetration Area "B"/263A   *35   074(3)     RAB 7   Relay Room/262   *35   074(3)   122     RAB 8   Electrical Penetration Area "B"/263A   *35   074(3)   122     RAB 8   Felectrical Penetration Area "B"/263A   *35   074(1)   18.     RAB 8   Electrical Penetration Area "B"/212A   *21   071(2)   28.     Voltage Switchgear Room "B"/21A   *21   071(2)   24.   24.     RAB 8   Electrical Penetration Manel R	RAB	2	Ventilation Equi	p. Room/299	+40	0/1/21		4/0
RAB 3A   RAB Battery Exhaust Fan Room/406   +69   00     RAB 4   Cable Vault/260   +35   00     RAB 5   Electrical Penetration Area "A"/263   +35   00     RAB 6   Electrical Penetration Area "A"/263   +35   00     RAB 7   Relay Room/262   +35   01     Isolation Panels (9 Compartments   +35   01     - 2 per comp.)   - 2 per comp.)   +35   01     RAB 8A   High Voltage Switchgear Room "A"/212A   +21   0/1(1)   18,     RAB 8B   Electrical Equip. Room/2258 and High +21   0/1(2)   28,     Voltage Switchgear Room "B"/212   +21   0/1(1)   18,     RAB 9   Remote Shutdown Panel Room 217 4   +21   21   21     RAB 11   Battery Room "B"/213   +21   21   21     RAB 12   Battery Room "B"/214   +21   21   21     RAB 13   Battery Room "A"/214   +21   21   21     RAB 14   Emergency Diesel Gen. "B" Feed TK   +46   0/1   71     RAB 15A   Emergency Oiesel Gen. "A" Feed TK.   +46   0/1	RAB	3	RAB Corridor to	Relay Koom/201	+35	0/1(3)		0/10
RAB 3A   RAB 6   Cable Yault/260   735   00     RAB 4   Cable Yault/260   735   00     RAB 5   Electrical Penetration Area "B"/263A   *35   00     RAB 7   Relay Room/262   *35   00     Isolation Panels (9 Compartments   *35   01   12     - 2 per comp.)   - 2 per comp.)   *35   01     RAB 8A   High Voltage Switchgear Room "A"/212A   *21   0/1(1)   18,     RAB 8A   High Voltage Switchgear Room "B"/212   *21   0/1(2)   28,     Voltage Switchgear Room "B"/212   *21   0/1(2)   28,     Voltage Switchgear Room "B"/212   *21   (2)   2     480V Switchgear A322 Room   *21   (1)   8,     "A-B "A-B"/212B   *21   (2)   2     RAB 8E   CEA M/GISEt Room/216   *21   21   2     RAB 11   Battery Room "A-213   *21   21   2     RAB 12   Battery Room "A-214   *21   2   2     RAB 13   Emergency Diesel Gen. "B" Feed TK   *46   0/1     RAB 15 <td></td> <td></td> <td>RAB HVAC Switchg</td> <td>ear Equip. Room/323</td> <td>+60</td> <td></td> <td></td> <td>0/2</td>			RAB HVAC Switchg	ear Equip. Room/323	+60			0/2
RAB 4   Cable valt/200   autr/200   +35   00     RAB 5   Electrical Penetration Area "B"/263A   +35   00     RAB 7   Relay Room/262   +35   00     Isolation Panels (9 Compartments   +35   00     - 2 per comp.)   -2 per comp.)   +35   21     RAB 88   Electrical Equip. Room/258 and High   +21   0/1(1)   18,     RAB 88   Electrical Equip. Room/258 and High   +21   0/1(2)   28,     Voltage Switchgear Room "B"/212   480V Switchgear 3A32 Room   +21   (1)   8,     RAB 88   Electrical Room/216   +21   0/1(2)   28,     Woltage Switchgear Room "B"/212   480V Switchgear 3A32 Room   +21   1     RAB 85   CEA M/Giset Room/216   +21   1   2     RAB 9   Remote Shutdown Panel Room/217   +21   1   2     RAB 11   Battery Room "A"/214   +21   2   2     RAB 12   Battery Room "A"/214   +21   2   2     RAB 13   Emergency Diesel Gen. "B" Reod TK   +46   0/1     RAB 14   Emer	RAB	3A	RAB Battery Exna	ust Fan Room/400	+35			0/27
RAB 5   Electrical Penetration Area "B"/263A   +35   00     RAB 7   Relay Room/262   +35   (3)   12     Isolation Panels (9 Compartments   +35   (3)   12     - 2 per comp.)   - 2 per comp.)   +35   (3)   12     RAB 8A   High Voltage Switchgear Room "A"/212A   +21   0/1(1)   18     RAB 8B   Electrical Equip. Room/225B and High   +21   0/1(2)   28     Voltage Switchgear Room "B"/212   480V Switchgear A32 Room   +21   (1)   8     Woltage Switchgear Room "B"/213   +21   (2)   2/     RAB 8C   High Voltage Switchgear Room   +21   (1)   8     RAB 8C   Migh Voltage Switchgear Room   +21   (1)   8     RAB 82   CEA M/Giset Room/216   +21   2/   2/     RAB 83   Battery Room "B"/213   +21   2/   2/     RAB 11   Battery Room "A"/214A   +21   2/   2/     RAB 13   Battery Room "A"/214   +21   2/   2/     RAB 14   Emergency Diesel Gen. "A" Room/221   +21   0/1	KAB	4	Cable Vault/200	nation Area "A"/263	+35			0/13
RAB 7   Reletion Call Ferrer Rection Area 0 (Jobs)   +35   (3)   12/     RAB 7   Relay Room/252   +35   2/     Isolation Panels (9 Compartments   +35   2/     - 2 per comp.)   - 2 per comp.)   +35   2/     RAB 8A   High Voltage Switchgear Room "A"/212A   +21   0/1(1)   18,     RAB 8B   Electrical Equip. Room/2258 and High   +21   0/1(2)   28,     Voltage Switchgear Asom "B"/212   4800 Switchgear Sa2 Room   +21   (2)   2.     RAB 8C   High Voltage Switchgear Room   +21   (1)   8,     "A-B"/2128   memote Shutdown Panel Room/217 *   +21   2.     RAB 11   Battery Room "B"/213   +21   2.     RAB 12   Battery Room "AB"/214   +21   2.     RAB 13   Battery Room "A"/214   +21   2.     RAB 15   Emergency Diesel Gen. "B" Feed TK   +46   0/1     RAB 16A   Emergency Oiesel Gen. "A" Room/221   +21   0/1     RAB 16A   Emergency Oiesel Gen. "A" Room/221   +21   0/1     RAB 16A   Emergency Oiesel Gen. "A" Room/221	RAD	5	Electrical Penet	ration Area "B"/263A	+35			0/14
Isolation Panels (9 Compartments   +35   22     RAB 8A   High Voltage Switchgear Room "A"/212A   +21   0/1(1)   18,     RAB 8B   Electrical Equip. Room/2258 and High +21   0/1(2)   28,     Voltage Switchgear Room "B"/212   +21   0/1(1)   18,     RAB 8B   Electrical Equip. Room/2258 and High +21   0/1(2)   28,     Voltage Switchgear Acom "B"/212   +21   0/1(2)   29,     RAB 8C   High Voltage Switchgear Room "B"/212   +21   (2)   2,     RAB 8C   High Voltage Switchgear Room "B"/212   +21   (2)   2,     RAB 8C   High Voltage Switchgear Room "B"/214   +21   (2)   2,     RAB 9   Remote Shutdown Panel Room/217 +   +21   1,     RAB 11   Battery Room "A8"/214A   +21   2,     RAB 12   Battery Room "A8"/214   +21   2,     RAB 13   Emergency Diesel Gen. "B" Room/222   +21   0/1     RAB 15   Emergency Diesel Gen. "A" Room/221   +21   0/1     RAB 16   Emergency Diesel Gen. "A" Room/221   +21   0/1     RAB 16   Emergency Diesel	DAD	7	Palay Room/262	acton niea o recon	+35	(3)		12/0
RAB 8A   High Voltage Switchgear Room "A"/212A   +21   0/1(1)   18,     RAB 8B   Electrical Equip. Room/2258 and High   +21   0/1(2)   28,     Voltage Switchgear Room "B"/212   480V Switchgear SA32 Room   +21   (2)   2,     RAB 8C   High Voltage Switchgear Room   +21   (2)   2,     RAB 8C   High Voltage Switchgear Room   +21   (1)   8,     "A-B"/2128   *21   (1)   8,     RAB 8E   CEA M/G:Set Room/216   *21   2,     RAB 9   Remote Shutdown Panel Room/217 *   +21   1,     RAB 11   Battery Room "B"/213   *21   2,     RAB 12   Battery Room "A"/214   *21   2,     RAB 13   Battery Room "A"/214   *21   2,     RAB 15   Emergency Diesel Gen. "B" Room/222   *21   0/1     RAB 16   Emergency Diesel Gen. "A" Room/221   *21   0/1     RAB 16   Emergency Oiesel Gen. "A" Room/221   *21   0/1     RAB 16   Emergency Oiesel Gen. "A" Room/225   *21   0/1     RAB 16   Emergency Oiesel Gen. "A" Room/221	RAD	, ,	Isolation Panels	(9 Compartments	+35	()		2/0
RAB   B8   Electrical Equip. Room/2258 and High   +21   0/1(2)   28/     Voltage Switchgear Room   "B"/212   +21   (2)   2/     RAB   80   Witchgear 3A32 Room   +21   (2)   2/     RAB   80   Witchgear 3A32 Room   +21   (2)   2/     RAB   80   Witchgear 3A32 Room   +21   (1)   8/     RAB   9   Remote Shutdown Panel Room/217 +   +21   2/   2/     RAB   9   Remote Shutdown Panel Room/217 +   +21   2/   2/     RAB   11   Battery Room "B"/213   +21   2/   2/     RAB   11   Battery Room "A"/214   +21   2/   2/     RAB   13   Battery Room "A"/214   +21   0/1   2/     RAB   15A   Emergency Diesel Gen. "B" Feed TK   +46   0/1   7/     RAB   16   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1   7/     RAB   16   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1   7/     RAB   16 <td>DAR</td> <td>94</td> <td>High Voltage Swi</td> <td>tchcear Room "A"/2124</td> <td>+21</td> <td>0/1(1)</td> <td></td> <td>18/0</td>	DAR	94	High Voltage Swi	tchcear Room "A"/2124	+21	0/1(1)		18/0
Voltage Switchgear Room 'B"/212   480V Switchgear 3A32 Room +21 (2)     480V Switchgear 3A32 Room +21 (1)   480V Switchgear 3A32 Room +21 (1)     RAB 8C   Hign Voltage Switchgear Room +21 (1)     RAB 8E   CEA M/GISet Room/216 +21 (2)     RAB 9   Remote Shutdown Panel Room/217 + +21 (2)     RAB 11   Battery Room 'B"/213 +21 (2)     RAB 12   Battery Room 'B"/214 +21 (2)     RAB 13   Battery Room 'A"/214 +21 (2)     RAB 15   Emergency Oiesel Gen. 'B" Room/222 +21 (7)     RAB 15   Emergency Diesel Gen. 'B" Feed TK +46 (7)     RAB 16   Emergency Diesel Gen. 'A" Room/221 +21 (7)     RAB 16   Emergency Diesel Gen. 'A" Feed Tk. +46 (7)     RAB 16A   Emergency Diesel Gen. 'A" Feed Tk. +46 (7)     RAB 16A   Emergency Diesel Gen. 'A" Feed Tk. +46 (7)     RAB 16A   Emergency Diesel Gen. 'A" Feed Tk. +46 (7)     RAB 16A   Emergency Diesel Gen. 'A'' Feed Tk. +46 (7)     RAB 16A   Emergency Diesel Gen. 'A'' Feed Tk. +46 (7)     RAB 16A   Emergency Diesel Gen. 'A'' Feed Tk. +46 (7)     RAB 16A   Emergency Diesel Gen. 'A'' Feed Tk. +46 (7)     RAB 16A   Emergency Diesel Gen. 'A'' Feed Tk. +46 (7)     RAB 17   CCW Pump 'A''/235 (7) <	PAR	88	Electrical Equip	Room/2258 and High	+21	0/1(2)		28/0
480V Switchgear 3A32 Room   +21   (2)   2/     RAB 8C   High Voltage Switchgear Room   +21   (1)   8/     RAB 8E   CEA M/GiSet Room/216   +21   (1)   8/     RAB 9   Remote Shutdown Panel Room/217 +   +21   2/     RAB 11   Battery Room "8"/213   +21   2/     RAB 12   Battery Room "AB"/214A   +21   2/     RAB 13   Battery Room "AB"/214A   +21   2/     RAB 15   Emergency Diesel Gen. "B" Room/222   +21   0/1     RAB 15   Emergency Diesel Gen. "B" Feed TK   +46   0/1     RAB 16   Emergency Diesel Gen. "A" Room/221   +21   0/1     RAB 16   Emergency Diesel Gen. "A" Room/221   +21   0/1     RAB 16   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 16   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 16   Emergency Diesel Gen. "A" Feed Tk.   +21   0/1     RAB 16   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 17   CCW Heat Exchanger "A"/220   +21   0/1     RA	nnu	00	Voltage Switch	cear Room "B"/212				
RAB 8C   High Voltage Switchgear Room   +21   (1)   8/     RAB 8E   CEA M/G:Set Room/216   +21   (1)   8/     RAB 9   Remote Shutdown Panel Room/217 4   +21   1     RAB 11   Battery Room "B"/213   +21   2/     RAB 12   Battery Room "B"/214   +21   2/     RAB 13   Battery Room "A"/214   +21   2/     RAB 15   Emergency Diesel Gen. "B" Feed TK   +46   0/1     RAB 16   Emergency Diesel Gen. "A" Room/221   +21   0/1     RAB 16   Emergency Diesel Gen. "A" Room/221   +21   0/1     RAB 16   Emergency Diesel Gen. "A" Room/221   +21   0/1     RAB 16   Emergency Diesel Gen. "A" Room/221   +21   0/1     RAB 16   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 16   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 17   CCW Heat Exchanger "A"/220   +21   00     RAB 18   CCW Heat Exchanger S218   +21   0     RAB 20   CCW Pump "A"/235   +21   0     RAB 23   Corrid			480V Switchgear	3A32 Room	+21	(2)		2/0
"A-B"/2128   ************************************	RAP	80	High Voltage Swi	tchgear Room	+21	(1)		8/0
RAB 8E   CEA M/G:Set Room/216   +21   21     RAB 9   Remote Shutdown Panel Room/217 4   +21   11     RAB 11   Battery Room "B"/213   +21   22     RAB 12   Battery Room "AB"/214   +21   22     RAB 13   Battery Room "AB"/214   +21   22     RAB 13   Battery Room "AB"/214   +21   22     RAB 13   Battery Room "AB"/214   +21   22     RAB 14   Emergency Diesel Gen. "B" Room/222   +21   0/1     RAB 15   Emergency Diesel Gen. "B" Feed TK   +46   0/1     RAB 16   Emergency Oiesel Gen. "A" Room/221   +21   0/1     RAB 16   Emergency Oiesel Gen. "A" Feed Tk.   +46   0/1     RAB 16   Emergency Oiesel Gen. "A" Feed Tk.   +46   0/1     RAB 17   CCW Heat Exchanger "B"/236   +21   0/1     RAB 18   CCW Heat Exchanger "A"/220   +21   0     RAB 19   CCW Pump "AB"/234   +21   0     RAB 21   COW Pump "B"/233   +21   0     RAB 23   Corridor to Emergency Diesel   e1   0 <td></td> <td></td> <td>"A-B"/2128</td> <td></td> <td></td> <td></td> <td></td> <td></td>			"A-B"/2128					
RAB 9   Remote Shutdown Panel Room/217 4   +21   1.     RAB 11   Battery Room "B"/213   +21   2.     RAB 12   Battery Room "AB"/214   +21   2.     RAB 13   Battery Room "A"/214   +21   2.     RAB 15   Emergency Diesel Gen. "B" Room/222   +21   0/1     RAB 15   Emergency Diesel Gen. "B" Room/222   +21   0/1     RAB 15   Emergency Diesel Gen. "B" Room/222   +21   0/1     RAB 15   Emergency Diesel Gen. "B" Room/221   +21   0/1     RAB 16   Emergency Diesel Gen. "A" Room/221   +21   0/1     RAB 16   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 16   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 16   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 16   Emergency Diesel Gen. "A"/220   +21   0/1     RAB 17   CCW Heat Exchanger "A"/220   +21   0     RAB 18   CCW Pump "A"/235   +21   0     RAB 20   CCW Pump "A"/233   +21   0     RAB 23   Corridor to CCW Pumps/218, Corri	RAE	3 8E	CEA M/G: Set Room	/216 '	+21			2/0
RAB 11   Battery Room "B"/213   +21   2.     RAB 12   Battery Room "AB"/214   +21   2.     RAB 13   Battery Room "A"/214   +21   2.     RAB 13   Battery Room "A"/214   +21   2.     RAB 15   Emergency Diesel Gen. "B" Room/222   +21   0/1     RAB 15A   Emergency Diesel Gen. "B" Feed TK   +46   0/1     RAB 16A   Emergency Diesel Gen. "A" Room/221   +21   0/1     RAB 16A   Emergency Diesel Gen. "A" Feed TK.   +46   0/1     RAB 16A   Emergency Diesel Gen. "A" Room/221   +21   0/1     RAB 16A   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 16A   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 16A   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 16A   Emergency Diesel Gen. "A"/220   +21   0/1     RAB 17   CCW Heat Exchanger "A"/220   +21   0     RAB 18   CCW Pump "A"/235   +21   0     RAB 20   CCW Pump "B"/233   +21   0     Gen. /225A   Gen. /225A   +21 <td>RAE</td> <td>9</td> <td>Remote Shutdown</td> <td>Panel Room/217 4</td> <td>+21</td> <td></td> <td></td> <td>1/0</td>	RAE	9	Remote Shutdown	Panel Room/217 4	+21			1/0
RAB 12   Battery Room "AB"/214A   +21   2.     RAB 13   Battery Room "A"/214   +21   2.     RAB 15   Emergency Diesel Gen. "B" Room/222   +21   0/1     RAB 15A   Emergency Diesel Gen. "B" Feed TK   +46   0/1     RAB 16A   Emergency Diesel Gen. "A" Room/221   +21   0/1     RAB 16A   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 16A   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 16A   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 16A   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 16A   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 16A   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 16A   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 17   CCW Heat Exchanger "B"/236   +21   0     RAB 19   CCW Pump "A"/235   +21   0     RAB 21   CCW Pump "B"/233   +21   0     RAB 23   Corridor to CCW Pumps/218, Corridor   +21   0     Gen. /225A	RAB	3 11	Battery Room "B"	/213/	+21			2/0
RAB 13Battery Room "A"/214+21+21RAB 15Emergency Diesel Gen. "B" Room/222+210/1RAB 15AEmergency Diesel Gen. "B" Feed TK+460/1RAB 16Emergency Diesel Gen. "A" Room/221+210/1RAB 16Emergency Diesel Gen. "A" Feed Tk.+460/1RAB 16AEmergency Diesel Gen. "A" Feed Tk.+460/1RAB 16AEmergency Diesel Gen. "A" Feed Tk.+460/1RAB 16AEmergency Diesel Gen. "A" Feed Tk.+460/1RAB 17CCW Heat Exchanger "B"/236+210RAB 18CCW Heat Exchanger "A"/220+210RAB 19CCW Pump "A"/235+210RAB 20CCW Pump "AB"/234+210RAB 21CCW Pump "B"/233+210RAB 23Corridor to CCW Pumps/218, Corridor+210Corridor to Emergency DieselGen. /225A+210(1) Common Resistor Wire3/4 3-51AMENDMENT NO. 18, 24	RAB	12	Battery Room "AB	"/214A	+21			2/0
RAB 15   Emergency Diesel Gen. "B" Room/222   +21   0/1     RAB 15A   Emergency Diesel Gen. "B" Feed TK   +46   0/1     RAB 16   Emergency Diesel Gen. "A" Room/221   +21   0/1     RAB 16   Emergency Diesel Gen. "A" Room/221   +21   0/1     RAB 16   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 16A   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 16A   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 16A   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 17   CCW Heat Exchanger "B"/236   +21   0     RAB 18   CCW Heat Exchanger "A"/220   +21   0     RAB 19   CCW Pump "A"/235   +21   0     RAB 20   CCW Pump "AB"/234   +21   0     RAB 23   Corridor to CCW Pumps/218, Corridor   +21   0     I   Corridor to Emergency Diesel   6   +21   0     I   Corridor to Emergency Diesel   6   +21   0     I   Corridor to Emergency Diesel   6   +21   0	RAE	3 13	Battery Room "A"	/214	+21			2/0
RAB 15A   Emergency Diesel Gen. "B" Feed TK   +46   0/1     RAB 16   Emergency Diesel Gen. "A" Room/221   +21   9/1     RAB 16   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 16A   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 16A   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 16A   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 16A   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     RAB 17   CCW Heat Exchanger "B"/236   +21   0     RAB 18   CCW Heat Exchanger "A"/220   +21   0     RAB 19   CCW Pump "A"/235   +21   0     RAB 20   CCW Pump "B"/233   +21   0     RAB 21   CCW Pump "B"/233   +21   0     RAB 23   Corridor to Emergency Diesel   6   +21   0     Gen. /225A   Gen. /225A   -   -   0     (1) Common Resistor Wire   3/4 3-51   AMENDMENT NO. 15, 24	RAE	3 15	Emergency Diese)	Gen. "B" Room/222	+21	0/1		
RAB 16   Emergency Diesel Gen. "A" Room/221   +21   0/1     RAB 16A   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     Room 328A   Room 328A   +21   0     RAB 17   CCW Heat Exchanger "B"/236   +21   0     RAB 18   CCW Heat Exchanger "A"/220   +21   0     RAB 19   CCW Pump "A"/235   +21   0     RAB 20   CCW Pump "AB"/234   +21   0     RAB 21   CCW Pump "B"/233   +21   0     RAB 23   Corridor to CCW Pumps/218, Corridor   +21   0     Corridor to Emergency Diesel   Gen./225A   +21   0     (1)Common Resistor Wire   3/4 3-51   AMENDMENT NO. IS. 24	RAE	8 15A	Emergency Diesel Room/328A	Gen. "B" Feed TK	+46	0/1		
RAB 16A   Emergency Diesel Gen. "A" Feed Tk.   +46   0/1     Room 328A   Room 328A   +21   0     RAB 17   CCW Heat Exchanger "B"/236   +21   0     RAB 18   CCW Heat Exchanger "A"/220   +21   0     RAB 19   CCW Pump "A"/235   +21   0     RAB 20   CCW Pump "AB"/234   +21   0     RAB 21   CCW Pump "B"/233   +21   0     RAB 23   Corridor to CCW Pumps/218, Corridor   +21   0     I to CCW Heat Exchangers/219 and   Corridor to Emergency Diese   0     Gen. /225A   Gen. /225A   AMENDMENT NO. IS, 24	RAE	3 16	Emergency Diesel	Gen. "A" Room/221	+21	0/1		
Room 328A   +21     RAB 17   CCW Heat Exchanger "A"/236   +21     RAB 18   CCW Heat Exchanger "A"/220   +21     RAB 19   CCW Pump "A"/235   +21     RAB 20   CCW Pump "AB"/234   +21     RAB 21   CCW Pump "B"/233   +21     RAB 23   Corridor to CCW Pumps/218, Corridor   +21     RAB 23   Corridor to Emergency Diesel   0     Gen./225A   Gen./225A   0     (1)Common Resistor Wire   3/4 3-51   AMENDMENT NO, IB, 24	RAE	3 16A	Emergency Diesel	Gen. "A" Feed Tk.	+46	0/2		
RAB 17   CCW Heat Exchanger "B"/236   +21   00     RAB 18   CCW Heat Exchanger "A"/220   +21   00     RAB 19   CCW Pump "A"/235   +21   00     RAB 20   CCW Pump "AB"/234   +21   01     RAB 21   CCW Pump "B"/233   +21   01     RAB 23   Corridor to CCW Pumps/218, Corridor   +21   01     Corridor to CCW Heat Exchangers/219 and Corridor to Emergency Diesel Gen./225A   00     (1)Common Resistor Wire (3)Common Resistor Wire (3)Common Resistor Wire   3/4 3-51   AMENDMENT NO. 18, 24			Room 328A			1		A / 4
RAB 18 CCW Heat Exchanger "A"/220 +21 RAB 19 CCW Pump "A"/235 +21 RAB 20 CCW Pump "AB"/234 +21 RAB 21 CCW Pump "B"/233 +21 RAB 23 Corridor to CCW Pumps/218, Corridor +21 to CCW Heat Exchangers/219 and Corridor to Emergency Diesel Gen./225A (1)Common Resistor Wire (2)Common Resistor Wire (3)Common Resistor Wire WATERFORD - UNIT 3 3/4 3-51 AMENDMENT NO. 15, 24	RAE	3 17	CCW Heat Exchang	er "8"/236	+21	5 ( S. )		0/4
RAB 19 CCW Pump "A"/235 +21 RAB 20 CCW Pump "AB"/234 +21 RAB 21 CCW Pump "B"/233 +21 RAB 23 Corridor to CCW Pumps/218, Corridor +21 to CCW Heat Exchangers/219 and Corridor to Emergency Diesel Gen./225A (1)Common Resistor Wire (2)Common Resistor Wire (3)Common Resistor Wire WATERFORD - UNIT 3 3/4 3-51 AMENDMENT NO. IS, 24	RA	3 18	CCW Heat Exchang	er "A"/220	+21			0/4
RAB 20 CCW Pump "AB"/234 +21 RAB 21 CCW Pump "B"/233 +21 RAB 23 Corridor to CCW Pumps/218, Corridor +21 to CCW Heat Exchangers/219 and Corridor to Emergency Diesel Gen./225A (1)Common Resistor Wire (2)Common Resistor Wire (3)Common Resistor Wire WATERFORD - UNIT 3 3/4 3-51 AMENDMENT NO. IS, 24	RAE	B 19	CCW Pump "A"/235		*21			0/2
RAB 21 CCW Pump "B"/233 RAB 23 Corridor to CCW Pumps/218, Corridor +21 to CCW Heat Exchangers/219 and Corridor to Emergency Diesel Gen./225A (1)Common Resistor Wire (2)Common Resistor Wire (3)Common Resistor Wire WATERFORD - UNIT 3 3/4 3-51 AMENDMENT NO. IS, 24	RAE	B 20	CCW Pump "AB"/23	4	+21			1/0
RAB 23 Corridor to CCW Pumps/218, Corridor +21 to CCW Heat Exchangers/219 and Corridor to Emergency Diesel Gen./225A (1)Common Resistor Wire (2)Common Resistor Wire (3)Common Resistor Wire wATERFORD - UNIT 3 3/4 3-51 AMENDMENT NO. IS, 24	RA	8 21	CCW Pump "8"/233	Constitute	+21			N 39
(1)Common Resistor Wire (2)Common Resistor Wire (3)Common Resistor Wire WATERFORD - UNIT 3 3/4 3-51 AMENDMENT NO. IS, 24	RA	8 23	to CCW Heat Ex Corridor to Em Gen./225A	changers/218, Corridor changers/219 and mergency Diesel	+61			
(2)Common Resistor Wire (3)Common Resistor Wire WATERFORD - UNIT 3 3/4 3-51 AMENDMENT NO. 15, 24	(1	)Common	Resistor Wire					
(3)Common Resistor Wire WATERFORD - UNIT 3 3/4 3-51 AMENDMENT NO. IS. 24	(2	)Common	Resistor Wire					
WATERFORD # UNIT 3 3/4 3*51 AMENUMENT NU. 10, 10	(3	)Common	Resistor Wire			ENDMENT	NO TR	24 36
	WA	TERFORD	- UNIT 3	3/4 3-51	AM	CHOMENI	NU. AP,	P

PROposed

# TABLE 3. 3-11 (Continued) FIRE DETECTION INSTRUMENTS

	1			IN	STRUMENTS*
	1		ELEVATION	HEAT	FLAME SHOKE
ZONE		ROOM NAME / NUMBER	(12)	(x/y)	(x/y) (x/y)
1.	REACTOR	AUXILIARY BUILDING (Continued)			/
RAB	25	Equip. Access Area/226 (wing area)	+21	- · · · ·	15/0
RAB	27A	HAV Room/124	* 7	/	0/6
RAS	278	Electrical Area and Health Physics Offices/122	• 7	/	0/35
RAB	27C	ISC Room/120	• 7	/	0/6
RAB	270	Communications Equip. Room/123	•1/		1/0
RAB	31	Corridors and Passageways	• •		0/24
		Corridors on sastside	74		0/21
RAS	32	Wing Area westside - Auxiliary Com- ponent Cooling Water Pump "A"/853	-25		32/0
		and Pipe Penetration Area/8100	- 4		
		Wing Area Center/853 and 8100	-35 &		28/0
			- 4		22.10
		Wing Area eastside-Component Cooling Water Pump "8"/853 and Pipe	-35		31/0
		Penetration Area/8100			0/18
RAB	33	S/D Cooling Heat Exchangers A68/820	- 35		0/10
RAB	34	Valve Operating Enclosure Bay Room "A"/854	-15.5		2/0
		Valve Operating Enclosure Bay Room "B" 855A	-15.5		4/0
RAR	35	Safety Injection Pump Room 8/816	-35		10/0
RAR	36	Safety Injection Pump Room A/815	-35		10/0
RAB	37	Motor-Orivan Emergency Feedpump	-35		0/1
RAB	38	Motor-Driven Emergency Feedpump	- 35		1/0
RAB	39	General Equipment Area/85, 12, 13,	- 35		0/10
		Corridors & General Equip. Areas/85.	- 35		0/28
	/	East Corridor & General Equip. Areas	/ -35		0.715
	1 .	B1/, 23 6 23	- 35		4/0
	-/	BA Hake-up Tank A /030	- 35		4/0
	1	Charles Charles Tack "A"/850	- 35		3×0
RAE	40	Diesel Storage Tank "8"/852	- 35		3/0
PAS	41	Ulesel Scorege lank o /ook			

TOTAL NUMBER OF

Proposed

# TABLE 3.3-11 (Continued) FIRE DETECTION INSTRUMENTS

				INSTRUMENTS*	
ZONE	ROOM NAME/NUMBER	ELEVATION (ft)	HEAT	FLAME SMOKE	
2. REACTOR	CONTAINMENT BUILDING**		/		
RCB 1 RCB 2 RCB 3 RCB 4 CT 1&3 CT 2&4	Annulus/420*** Electrical Penetration Area A Electrical Penetration Area B Reactor Cable Trays Wet & Dry Cooling Tower "A" Cable To Wet & Dry Cooling Tower "B" Cable To	+46 +21 +21 +46 ray	1/0	2/0 24/0 21/0 16/0	
3. FUEL HA	NOLING BUILDING				
FHB 2	Purification Pump Room/8155, Fuel Po Pump "A"X8157, Fuel Pool Pump "8", 8156, Fuel Pool Heater Exchanger/ 8159 and Action Pool Heater Exchanger/	01 + 1		10/0	
	Emergency Filter Train Unit/B152 Emergency Elect. Equip. Room/B151	+ 1 + 1		6/0 1/0	
4. CHARCOA	L AIR FILTER UNITS				
E-35 (3A-SA E-35 (38-S8 E-17 (3A-SA	) FHB Emergency Filter Train "A" ) FHB Emergency Filter Train "B" ) Shield Building Ventilation	* 1 * 1 *46	1/0 1/0 1/0		
E-17 (38-58	Shield Building Ventivation	+46	1/0		
E-23 (3A-5A	Controlled Ventilation Area	+46	1/0		
E-23 (3A-58	Controlled Ventilation Area System Filter Train "8"	+46	1/1		
S-8 (3A-SA)	Control Room Emergency Filter Train "A"	+46	1/0		
S-8 (38-58)	Control Room Emergency Filter Train "8"	+46	1/0		
	TABLE NOTATIONS	/			

\*(x/y): x is the number of Function A (early warning fire detection and notification only) instruments.

y is the number of Function B (actuation of fire suppression systems and early warning and notification) instruments.

\*\*The fire detection instruments located within the containment are not required to be OPERABLE during the performance of Type A containment leakage rata tests.

\*\*\*Annulus detection is provided by smoke detectors mounted on the duct of the Annulus Negative Pressure System. This segment of duct is physically located in the RAB H&V Equipment Room (299).

WATERFORD - UNIT 3

TOTAL NUMBER OF

Proposed

ALANT SYSTEMS 3/4 7.10 FIRE SUPPRESSION SYSTEMS

FIRE SUPPRESSION WATER SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.10.1 The fire suppression water system shall be OPERABLE with:

- a. Two five suppression pumps, each with a capacity of 2000 gpm, with their discharge aligned to the fire suppression header.
- Separate water supplies, each with a minimum contained volume of 237,000 gallans (33 feet), and
- c. An OPERABLE flow path capable of taking suction from the east fire water tank and the west fire water tank and transferring the water through distribution piping with OPERABLE sectionalizing control or isolation valves to the yard hydrant curb valves, the last valve ahead of the water flow alarm device on each sprinkler or hose standpipe, and the last valve ahead of the deluge valve on each deluge or spray system required to be OPERABLE per Specifications 3.7.10.2, 3.7.10.4, and 3.7/10.5.

APPLICABILITY: At all times.

ACTION:

- a. With one pump and/or one water supply inoperable, restore at least two pumps and/or water supplies to OPERABLE status within 7 days or provide an alternate backup pump or supply.
- b. With the fire suppression water system otherwise inoperable, establish a backup fire suppression water system within 24 hours.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.10.1.1 The fire suppression water system shall be demonstrated OPERABLE:

- a. At least once per 7 days by verifying the contained water supply volume.
- b. At least once per 31 days by starting the electric motor-driven pump and operating it for at least 15 minutes.

At least once per 31 days by verifying that each valve (manual, power-operated, or automatic) in the flow path that is not locked, sealed, or otherwise secured in position is in its correct position.

WATERFORD - UNIT 3

Proposed

SURVEILLANCE REQUIREMENTS (Continued)

- d. At least once per 12 months by performance of a system flush.
- e. At least once per 12 months by cycling each testable valve in the flow bath through at least one complete cycle of full travel.
- f. At least a per 18 months by performing a system functional test which include simulated automatic actuation of the system throughout its operating sequence, and:
  - Verifying that each pump develops at least 2000 gpm at a total head of 100 psid by verifying at least 3 points on the pump performance curve during performance testing.
  - Cycling each value in the flow path that is not testable during plant operation through at least one complete cycle of full travel, and
  - Verifying that each fire suppression pump starts (sequentially) to maintain the fire suppression water system pressure greater than or equal to 96.5 psig.
- g. At least once per 3 years by performing a flow test of the system in accordance with Chapter 5, Section 11 of the Fire Protection Handbook, 14th Edition, published by the National Fire Protection Association.

4.7.10.1.2 Each fire pump diesel engine shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying:
  - 1. The diesel fuel oil day storage tank contains at least 170 gallons of fuel, and
  - The diesel starts from ambient conditions and operates for at least 30 minutes.
- b. At least once per 92 days by verifying that a sample of diesel fuel from the fuel storage tank, obtained in accordance with ASIM-D270-75, is within the acceptable limits specified in Table 1 of ASIM D975-77 when checked for viscosity, water and sediment.
- c. At least once per 18 months during shutdown, by subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for the class of service.

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SURVEILLANCE REQUIREMENTS (Continued)

4.7.10.1.3 Each fire pump diesel starting 12-volt battery bank and charger shall be demonstrated OPERABLE:

- a. At least once per 7 days by verifying that:
  - 1. The electrolyte level of mach battery is above the plates, and
  - The overall battery voltage is greater than or equal to 12 volts.
- b. At least once per 92 days by verifying that the specific gravity is appropriate for continued service of the battery.
- c. At least once per 18 months by verifying that:
  - The batteries and battery racks show no visual indication of physical damage or abnormal deterioration, and.
  - The battery-to-battery and terminal connections are clean, tight, free of corrosion, and coated with anticorrosion material.

Proposed

SPRAY AND/OR SPRINKLER SYSTEMS

LIMITING CONDITION FOR OPERATION

3.7.10.2 The following spray and/or sprinkler systems shall be OPERABLE:

Sprinkler No.	Bidg./Elev.	Location
£24-2	0.00	Reactor Coolant Pumps 1A, 1B
EDM-3A	ALD	Reactor Coolant Pump 2A, 2B
EDM-10	NAS +21, +45	Diesel Generator Area A, Feed Tank Room A
FFM-48	RAB +21, +46	Diesel Generator Grea B, Feed Tank Room B
PPM-11A	RA8 - 35	Emergency D/G Fuel Oil Tank A
1 CM +42	ne "au	Emergency D/G Fuel Qil Tank 8
FPM=16	FWPH +15	Fire Water Pump House
FPM=17	RA5 +35	Cable Vault Area
FPM-18	RAB +35	Electrical Penetration Area 1
FPM-19	RAB +35	Electrical Penetration Area 2
FPM-22	RAB -4	Corridor and Blowdown Tenk Rooms
FPM-23	RAB - 35	Corridor, Shutdown Heat Exchanger Boome
		FFW Pump Room
FPM-24	RA8 +21	Corridors CCW Area
FON-255	949 +21	North High Voltage Switchman Poor
FPM-26	RA8 +46	Ventilation Equipment Prome
FPM-27	848 +7	HVAC Boome
FPM-28	PAR - 35	Auviliany Concerns Conline Mater Dura Barra
FPM-29	PAR + 35	Palay Poor Consider
50M- 304	240 - 20	Relay Roomy Corrigor
FDM- 11	DAD 446	South High voltage Switchgear Koom
1111-22	KAD THO	E-17(JAFSA) Shield Building Ventilation
COM- 34	040	System Filter, Irain A Charcoal Adsorber
6 6 FT 1 9 4	KA5 +40	E-1/(38-58) Shield Building Ventilation
CON- DC		System Filter, Train B Charcoal Adsorber
F MM- 36	RAS +45	E=23(3A-SA) Controlled Ventilation Area
and the	when the states	System Filter, Train A Charcoal Adsorber
PPM= 37	RA8 +46	E-23(38-S8) Controlled Ventilation Area
		System Filter, Train 8 Charcoal Adsorber

APPLICABILITY: Whenever equipment protected by the spray/sprinkler system is required to be OPERABLE.

ACTION:

a. With one or more of the above required spray and/or sprinkler systems inoperable, within 1 hour establish a continuous fire watch with backup fire suppression equipment for those areas in which redundant systems or components could be damaged unless the spray and/or sprinkler system(s) is located inside the containment, then inspect that containment area at least once per 8 hours or monitor air temperature at least once per hour at the locations listed in Specification 4.6.1.5; for other areas, establish an hourly fire watch patrol.

b.

The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

WATERFORD - UNIT 3

Amendment No. 28

PRO posed

# SURVEILLANCE REQUIREMENTS

4.7.10.2 Each of the above required spray and/or sprinkler systems shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying that each valve (manual, power operated, or automatic) in the flow path that is not locked, sealed, or otherwise secured in position is in its correct position.
- b. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.
- c. At least once per 18 months:
  - By performing a system functional test which includes simulated automatic actuation of the system, and:
    - a) Verifying that the automatic alves in the flow path actuate to their correct pathlions on a thermal/preaction test signal, and
    - b) Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel.
  - By a visual inspection of the dry pipe spray and sprinkler headers to verify their integrity, and
  - By a visual inspection of each nozzle's spray area to verify the spray pattern is not obstructed.
- d. At least once per 3 years by performing an air flow test through each open head spray and sprinkler header\* system listed in Section 3.7.10.2 and verifying the spray nozzles are unobstructed.

\*In fieu of an air flow test, the charcoal filter system spray nozzles need only be visually inspected and verified to be unobstructed each time the charcoal is changed.

WATERFORD - UNIT 3

Amendment No. 28

PROPOSEd

HALON SYSTEMS

# LIMITING CONCITION FOR OPERATION

3.7.10.3 The computer room Halon system shall be OPERABLE.

APPLICABILITY: WREnever equipment protected by the Halon system is required to be OPERABLE.

ACTION:

- a. with the above required Halon system inoperable, within 1 hour establish an hourly fire watch patrol.
- b. The provisions of Specifications 3.0.3 and 3.8.4 are not applicable.

# SURVEILLANCE REQUIREMENTS

4 7 10 3 The above required Halon system that be demonstrated

- a. At least once per 31 days by verifying that each valve (manual, power-operated, or automatic) in the flow path is in its correct position.
- b. At least once per 6 months by verifying Halon storage tank weight to be at least 95% of full charge weight (level) and pressure to be it lesst 90% of full charge pressure.
- c. At least once per 18 months by verifying:
  - The system, including associated ventilation dampers and fire door release mechanisms, actuates manually and automatically, upon receipt of a simulated test signal, and
  - Performance of a flow test through headers and nozzles to assure no blockage.

Proposed

FIRE HOSE STATIONS

LIMITING CONDITION FOR OPERATION

3.7.10.4 The fire hose stations shown in Table 3.7-4 shall be OPERABLE.

APPLICABLIITY: Whenever equipment in the areas protected by the fire hose stations is required to be OPERABLE.

ACTION:

- a. With one or more of the fire hose stations shown in Table 3.7-4 inoperable, provide gated wye(s) on the nearest operable hose station(s). One outlet of the wye shall be connected to the standard length of hose provided for the hose station. The second outlet of the wye shall be connected to a length of hose sufficient to provide coverage for the area left unprotected by the inoperable hose station. Where it can be demonstrated that the physical routing of the fire hose would result in a recognizable hazard to operating technicians, plant equipment, or the hose itself, the fire hose shall be stored in a roll at the outlet of the operable hose station. Signs shall be mounted above the gated wye(s) to identify the proper hose to use. The above action shall be accomplished within 1 hour if the inoperable fire hose is the primary means of fire suppression; otherwise, route the additional hose within 24 hours.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.10.4 Each of the fire hose stations shown in Table 3.7-4 shall be demonstrated OPERABLE:

- At least once per 31 days by visual inspection of the stations accessible during plant operation to assure all required equipment is at the station.
- b. At least once per 18 months by:
  - Visual inspection of the stations not accessible during plant operations to assure all required equipment is at the station.
  - 2. Removing the hose for inspection and reracking, and
  - Inspecting all gaskets and replacing any degraded gaskets in the couplings.

SURVEILLANCE REQUIREMENTS (Continued)

PRoposed

c. At least once per 3 years by:-

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 Partially opening each hose station valve to verify valve OPERABILITY and no flow blockage.

2. Conducting a hose hydrostatic test at a pressure of 150 psig or at least 50 psig above maximum fire main operating pressure, whichever is greater.

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PRoposed\_

TABLE 3.7-4

FIRE HOSE STATIONS

BLDG.	COLUMN	ELEVATION (Feet MSL)	HOSE RACK IDENTIFICATION
FHB	2FH-U	- 35	FH/A-010
FHB	SEH-V	+1	FH/A-020
FHB	SEH-V	+1	FH/A-021
FHB	2FM-T	+21	FH/A-040
FHR	2FH-Y	+18	FH/A-041
FHB	Escand Frit	+21	FH/A-043
FHB	SEH-W	+18	FH/A-042
FHR	2FH-T	+46	FH/A-030
FHR	7EH-W	+46	FH/A-031
RAR	1-94	- 35	RA/F=101
RAR	1-64	-35	RA/F-102
RAB	H-44	- 35	RA/F-103
PAR	1=34	- 35	PA/E-104
DAR	K-44	- 35	PA/F-105
DAR	M-1047	225	PA/C-106
DAD	M- 20	- 25	PA/A-107
DAR	M- 200	-20	PA/K-109
DAD	M-1107	-20	PA/1 = 100
DAD	M-11AC	-20	RA/ L-109
DAD	N-10A	/	RA/P-110
RAB	N-11M		RA/0-201
RAD	H-11A		RA/ 0-202
KAB	J-10A		RA/E=203
RAB	J-BA		RA/M-204
RAB	H-4A	-4	RA/1-205
RAB	K-4A	-4	RA/J=206
RAB	M-10AZ	-4	RA/C=207
RAB	M- 3A	-4	RA/A-208
RAB	LY-8A	-4/	RA/8=209
RAB	K12A	1	RA/D-301
RAB	JILA	/*1	RA/D-302
RAB	H-11A	+21	RA/E-401
RAB	H-9A	+21	RA/E-402
RAB	K-11A	*21	RA/0-403
RAB	L-7A	+21	RA/C-411
RAB	N-10AZ	*21	RA/C-405
RAB	J-6A	+21	RA/I-406
RAB	H-4A	+21	RA/I-407
RAB	J-1A	+21	RA/I-408
RAB	K-4A	+21	RA/J-409
RAB	L-7A	+21	RA/G-410
RAB	N-4A	+21	RA/A-412
RAS	L-2A	+21	RA/A-413
RAB	/H-12A	+35	RA/E-501
RAB	K-11A	+35	RA/E-502
RAB	N-JOAZ	+35	RA/C-503
RAB	Northeast Stairw	e]]+21	RA/C-404

WATERFORD - UNIT 3

Proposed

TABLE 3.7-4 (Continued)

FIRE HOSE STATIONS

BLDG	COLUMN	ELEVATION (Feet MSL)	HOSE RACK IDENTIFICATION
RAB	He 10A	+35	RA/E-504
RAB	K-9A	+35	RA/E-505
RAB	L-94	+35	RA/C-506
RAB	LY-6A	+35	RA/A-507
RAB	3-9A	+35	RA/8-508
RAB	L-BA	+35	RA/E-509
RAB	G-9A	+35	86/F-510
RAB	J-12A	+46	/RA/E-601
RAB	K-11A .	+46	RA/G-602
RAB	K-10A	+46	RA/G-603
RAB	K-84	+46	RA/G-604
RAB	G-7A	+46	8A/G-605
RAB	K-6A	+46	RA/J-606
RAB	K-2A	+46	RA/J-607
RAD	J-2A	+46	RA/J-608
RAB	J-3A	+46	RA/J-609
RAB	K-2A	+69	RA/J=701
*RCB	19	-4	R/A-201
*RCB	12	-4	R/A-202
*RCB	6	-4 / - \	R/8-203
*RCB	1	-4	R/B-204
*RCB	20	+21	R/A-401
*RCB	13	+21	R/A-402
*RCB	7	+23	R/B-403
*RCB	1	+21	R/8-404
*RCB	13	+35	R/A-502
*RCB	20	+46	R/A-601
*RCB	13	+46	R/A-502
*RCB	7	+46	R/B-603
*RCB	2 /	+46	R/B-684
	- / / · · ·		

\*Indicates all hose stations not accessible during plant operations and shall be demonstrated operable at least once per 18 months.

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Proposed

YARD FIRE HYDRANTS AND HYDRANT HOSE HOUSES

# LIMITING CONDITION FOR OPERATION

3.7.10.5 The yard fire hydrants and associated hydrant hose houses shown in Table 3.7-5 shall be OPERABLE.

APPLICABILITY: Whenever equipment in the areas protected by the yard fire hydrants is required to be OPERABLE.

### ACTION:

- a. With one or more of the yard fire hydrants or associated hydrant hose houses shown in Table 3.7-5 inoperable, within 1 hour have sufficient additional lengths of 2-1/2-inch diameter hose located in an adjacent OPERABLE hydrant hose house to provide service to the unprotected area(s) if the inoperable fire hose is the primary means of fire suppression; otherwise, provide the additional hose within 24 hours.
- b. The provisions of Specifications/3.0.3 and 3.0.4 are not applicable.

### SURVEILLANCE REQUIREMENTS

4.7.10.5 Each of the yard fire hydrants and associated hydrant hose houses shown in Table 3.7-5 shall be demonstrated ORERABLE:

- a. At least once per 31 days by visual inspection of the hydrant hose house to assure all required equipment is at the hose house.
- b. At least once per 12 months by:
  - Conducting a hose hydrostatic test at a pressure of 150 psig or at least 50 psig above maximum fire main operating pressure, whichever is greater.
  - Inspecting all the gaskets and replacing any degraded gaskets in the couplings.
  - Performing a flow check of each hydrant to verify its OPERABILITY.
  - Visually inspecting each yard fire hydrant and verifying that the hydrant barrel and the hydrant are not damaged.

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# TABLE 3.7-5



WATERFORD - UNIT 3

PROposed.

3/4.7.11 FIRE RATED ASSEMBLIES

### LIMITING SONDITION FOR OPERATION

3.7.11 All fire rated assemblies (walls, floor/ceilings, cable tray enclosures, and other fire barriers) separating safety-related fire areas or separating portions of redundant systems important to safe shutdown within a fire area and all sealing devices in fire rated assembly penetrations (fire doors, fire windows, fire dampers, cable, piping, and ventilation duct penetration seals) shall be OPERABLE.

# APPLICABILITY: At all times.

### ACTION:

- a. With one or more of the above required fire rated assemblies and/or sealing devices inoperable, within 1 hour either establish a continuous fire watch on at least one side of the affected assembly, or verify the OPERABILITY of the fire detectors on at least one side of the inoperable assembly and establish an hourly fire watch patrol.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

### SURVEILLANCE REQUIREMENTS

4.7.11.1 At least once per 18 months the above required fire rated assemblies and penetration sealing devices other than fire doors shall be verified OPERABLE by:

- a. Performing a visual inspection of the exposed surfaces of each fire rated assembly.
- Performing a visual inspection of each fire window/fire damper/ and associated hardware.
- c. Performing a visual inspection of at least 10% of each type of sealed penetration. If apparent changes in appearance or abnormal degradations are found, a visual inspection of an additional 10% of each type of sealed penetration shall be made. This inspection process shall continue until a 10% sample with no apparent changes in appearance or abnormal degradation is found. Samples shall be selected such that each penetration seal will be inspected at least once per 15 years.

PROposed

SURVEILLANCE REQUIREMENTS (Continued)

4.7.11.2 Each of the above required fire doors shall be verified OPERABLE by inspecting the automatic hold-open, release, and closing mechanism and latches at least once per 6 months, and by verifying:

- a. The OPERABILITY of the fire door supervision system for each electrically supervised fire door by performing a CHANNEL FUNCTIONAL TEST at least once per 31 days.
- b. That each locked-closed fire door is closed at least once per 7 days.
- c. That doors with automatic hold-open and release mechanisms are free of obstructions at least once per 24 hours and performing a functional test of these mechanisms at least once per 18 months.
- d. That each unlocked fire door without electrical supervision is closed at least once per 24 hours.

posed

# INSTRUMENTATION

# BASES

for the system is thus based on testing and operating experience, and the setpoint is set at the lowest achievable IDLH gas concentration providing reliable operation and the optimum detection of toxic gases. The setpoint is therefore subject to change wherein necessitated by operating experience such as a result of changes in the Waterford 3 area chemical atmospheric profile. The setpoint is established and controlled by procedure.

# 3/4.3.3.8 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.

## 3/4.3.3.9 LOOSE-PART DETECTION INSTRUMENTATION

The OPERABILITY of the loose-part detection instrumentation ensures that sufficient capability is available to detect loose metallic parts in the primary system and avoid or mitigate damage to primary system components. The allowable out-of-service times and Surveillance Requirements are consistent with the recommendations of Regulatory Guide 1.133, "Loose-Part Detection Program for the Primary System of Light-Water-Cooled Reactors," May 1981.

This section deleted

Proposed

### BASES

INSERT

### 3/4.7.9 SEALED SOURCE CONTAMINATION

The limitations on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 70.39(c) limits for plutonium. This limitation will ensure that leakage from byproduct, source, and special nuclear material sources will not exceed allowable intake values.

Sealed sources are classified into three groups according to their use, with Surveillance Requirements commensurate with the probability of damage to a source in that group. Those sources which are frequently handled are required to be tested more often than those which are not. Sealed sources which are continuously enclosed within a shielded mechanism (i.e. sealed sources within radiation monitoring or boron measuring devices) are considered to be stored and need not be tested unless they are removed from the shield mechanism.

# \$/4.7.10 FIRE SUPPRESSION SYSTEMS

The OPERABILITY of the fire suppression systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety-related equipment is located. The fire suppression system consists of the water system, spray and/or sprinklers, Halon, fire hose stations, and yard fire hydpants. The collective capability of the fire suppression systems is adequate to minimize potential damage to safety-related equipment and is a major element in the facility fire protection program.

In the event that portions of the fire suppression systems are inoperable, alternate backup fire fighting equipment is required to be made available in the affected areas until the inoperable equipment is restored to service. When the inoperable fire fighting equipment is intended for use as a backup means of fire suppression, a longer period of time is allowed to provide an alternate means of fire fighting than if the inoperable equipment is the primary means of fire suppression.

The Surveillance Requirements provide assurance that the minimum OPERABILITY requirements of the fire suppression systems are met. An allowance is made for ensuring a sufficient volume of Halon in the Halon storage tanks by verifying either the weight or the level of the tanks. Level measurements are made by either a U.L. or F.M. approved method.

In the event the fire suppression water system becomes inoperable. immediate corrective measures must be taken since this system provides the major fire suppression capability of the plant.

This section deleted

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# PLANT SYSTEMS

#### BASES

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# 3/4.7.11 FIRE RATED ASSEMBLIES

The OPERABILITY of the fire barriers and barrier penetrations ensure that fire damage will be limited. These design features minimize the possibility of a single fire involving more than one fire area prior to detection and extinguishment. The fire barriers, fire barrier penetrations for conduits, cable trays and piping, fire windows, fire dampers, and fire doors are periodically inspected to verify their OPERABILITY.

### 3/4.7.12 ESSENTIAL SERVICES CHILLED WATER SYSTEM

The OPERABILITY of the essential services chilled water system ensures that sufficient chilled water is supplied to those air handling systems which cool spaces containing equipment required for safety-related operations and, during normal plant operation, the nonessential spaces.

This section deleted

# UNIT STAFF (Continued)

delete

e.1.

b. At least one licensed Operator shall be in the control room when fuel is in the reactor. In addition, while the reactor is in MODE 1, 2, 3, or 4, at least one licensed Senior Operator shall be in the control room.

PROPOSEd

- c. A Health Physics Technician\* shall be on site when fuel is in the reactor;
- d. All CORE ALTERATIONS shall be observed and directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.
- A site fire brigade of at least five members shall be maintained on site at all times.\* The fire brigade shall not include the Shift Supervisor, the Shift Technical Advisor, nor the two other members of the minimum shift crew necessary for safe shutdown of the unit and any personnel required for other essential functions during a fire emergency.
  - Administrative procedures shall be developed and implemented to limit the working hours of individuals of the nuclear power plant operating staff who are responsible for manipulating plant controls or for adjusting on-line systems and equipment affecting plant safety which would have an immediate impact on public health and safety.

Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a normal 8-hour day, 40-hour week while the plant is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, the following guidelines shall be followed:

- An individual shall not be permitted to work more than 16 hours straight, excluding shift turnover time.
- An individual shall not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any 7-day period, all excluding shift turnover time.
- A break of at least 8 hours shall be allowed between work periods, including shift turnover time.

<sup>\*</sup>The Health Physics Technician and fire brigade composition may be less than the minimum requirements for a period of time not to exceed 2 hours, in order to accommodate unexpected absence, provided immediate action is taken to fill the required positions.

# UNIT STAFF (Continued)

 Except during extended shutdown periods, the use of overtime shall be considered on an individual basis and not for the entire staff on a shift.

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Any deviation from the above guidelines shall be authorized by the Plant Manager, the assistant Plant Managers, the Operations Superintendent or higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation. Controls shall be included in the procedures such that individual overtime will be reviewed monthly by the Plant Manager or his designee to assure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

# f.g. The Operations Superintendent shall hold a senior reactor operator license.

PROPOSE C ADMINISTRATIVE CONTROLS

Safety Newew Committee

RESPONSIBILITIES (Continued)

 Review of unit operations to detect potential hazards to nuclear safety.

Review of the File Protection Peogeam and implementing procedures and submittal of recommended changes to the

- h. Performance of special reviews, investigations, or analyses and reports thereon as requested by the Plant Manager or the Safety Review Committee.
- Review of the Security Plan and implementing procedures and submittal of recommended changes to the Safety Review Committee.
- Review of the Emergency Plan and implementing procedures and submittal of recommended changes to the Safety Roview Committee.
- k. Review and documentation of judgment concerning prolonged operation in bypass, channel trip, and/or repair of defective protection channels of process variables placed in bypass since the last PORC meeting.
- Review of proposed modifications to the CPC addressable constants based on information obtained through the Plant Computer-CPC data link.
- m. Review of any accidental, unplanned or uncontrolled radioactive release including reports covering evaluation, recommendations and disposition of the corrective action to prevent recurrence and the forwarding of these reports to the Vice President-Nuclear and to the Safety Review Committee.
- n. Review of changes to the PROCESS CONTROL PROGRAM and the OFFSITE DOSE CALCULATION MANUAL, and major changes to radwaste treatment systems.

### AUTHORITY

Add

6.5.1.7 The PORC shall:

- a. Recommend in writing to the Plant Manager, prior to implementation except as provided in Specification 6.8.3, approval or disapproval of items considered under Specification 6.5.1.6a. through d. and 1.
- b. Render determinations in writing, prior to implementation except as provided in Specification 6.8.3, with regard to whether or not each item considered under Specification 6.5.1.6a. through e. constitutes an unreviewed safety question.
- c. Provide written notification within 24 hours to the Vice President-Nuclear and the Safety Review Committee of disagreements between the PORC and the Plant Manager; however, the Plant Manager shall have responsibility for resolution of such disagreements pursuant to Specification 6.1.1.