

ATTACHMENT D  
 PROPOSED CHANGES TO TECHNICAL SPECIFICATIONS,  
 FACILITY OPERATING LICENSES NPF-11 AND NPF-18  
 LASALLE COUNTY STATION UNITS 1 & 2

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UNIT 1 LICENSE CONDITIONS - 2.C.(25)

Fire Protection Program (Section 9.5, SER, SSER #2, SSER #3 (NUREG-0519)).

- (a) The licensee shall maintain in effect and fully implement all provisions of the approved fire protection plan. In addition, the licensee shall maintain the fire protection program set forth in Appendix R to 10 CFR Part 50, except for the following deviations:

- (i) Hydrostatic hose tests in accordance with NEPA 1962-1979, and
- (ii) No automatic fire detection systems in areas 2K/3K and 5B4.

This License Condition is presently in effect, and will be superseded upon issuance of the standard license condition in accordance with the guidance of GLs 86-10 and 88-12.

- (b) Prior to initial criticality, the licensee shall install a 1-hour rated barrier on all four sides of a partially protected power cable pan and a general sprinkler system, both located in the diesel-generator corridor.

A general fire sprinkler system and a designed and installed fire protection system were done under Modifications 1-1-82-035, and 1-1-82-055 for the Unit 1 and Unit 2 diesel generator corridors. The NRC staff confirmed, per Section 1.1 of the LaSalle Safety Evaluation Report (NUREG-0519), Supplement 4, that the additional fire protection in the diesel generator corridor had been added prior to exceeding 5 percent power as required by this License Condition.

This License Condition was closed by Inspection Report 50-373/88018(DRP) dated 8/16/88.

- (c) Prior to startup after the first refueling outage, the licensee shall provide fire protection systems in fire areas 2C/3C, 4C3 and 6E.

This License Condition was tracked by Open Item (373/81-00-120(DRP)). The additional fire detection zones were installed under Modification 1-1-82-289. Amendment 44 to License NPF-11 was approved June 20, 1986. The NRC inspector verified that fire protection requirements of this License Condition were met. This Open Item was closed by Inspection Report 50-373/86035(DRP), dated 10/29/86.

- (d) Prior to startup after the first refueling outage, the licensee with respect to fire doors, shall implement one of the following:

- (i) Perform an engineering review of the manufacturer's certified doors and door frames by a nationally recognized laboratory to certify that the door and frames provide the required fire resistance rating, or
- (ii) Test a replicate "as installed" door assembly by a nationally recognized laboratory to determine the door rating, or

UNIT 1 LICENSE CONDITIONS - 2.C.(25) (continued)

(iii) Replace manufacturer's labeled doors and door frames with UL rated items.

This License Condition was tracked by Open Item (373/8100-130). This Open Item was closed by Inspection Report 50-373/86046(DRP), dated 2/18/87.

(e) Prior to startup after the first refueling outage, the licensee shall demonstrate the adequacy of its fire protection for record storage.

The Non-Compliance Item was closed by Inspection Report 50-373/83-12(DPRP), dated 6/13/83. The License Condition was closed by Inspection Report 373/83-25(DPRP), dated 8/3/83.

- (b) A prelube pump, powered from a reliable direct current power supply, be installed in the system to operate in parallel with the engine-driven lube oil pump, or an alternative acceptable to the NRC shall be installed to preclude dry-starting of the diesel-engine.
- (c) Controls and monitoring instrumentation be removed from the engine and engine skid, except instruments qualified for this location. The non-qualified control and monitoring instruments shall be installed on a free standing floor mounted panel and located on a vibration free floor area. If the floor is not vibration free, the panel shall be equipped with vibration mounts.

(22) Direct Current Power Systems (Section 8.3.1.2, SER)

Prior to startup after the first refueling outage for the 125 and 250-volt direct current systems for Divisions 1 and 2 and the 125-volt Division 3 direct current system, the following additional instrumentation shall be provided in the control room: (1) Battery current (ammeter-charge/discharge), (2) Battery charger output voltage (voltmeter), (3) Battery charger output current (ammeter), (4) Battery high discharge rate alarm, and (5) Battery charger trouble alarm. In the interim, the licensee shall implement approved procedures to monitor battery current, battery charger output voltage, and battery charger output current at the local panels at least once per eight hour shift.

(23) Reactor Containment Electrical Penetrations (Section 8.4.1, SER)

Prior to startup after the first refueling outage, a redundant fault current device (circuit breakers or fuses) shall be provided on each penetrating circuit that would limit a fault current surge to be less than the surge for which the penetration is qualified except for low energy (milliamps) instrument systems.

(24) Separation of Class 1E and Non-Class 1E Cable Trays (Section 8.4.6.1, SER, SSER #1, SSER #2)

Prior to startup after the first refueling outage, the licensee shall provide adequate separation or barriers between Class 1E and adjacent non-Class 1E cable trays.

(25) Fire Protection Program (Section 9.5, SER, SSER #2, SSER #3)

- (a) The licensee shall maintain in effect and fully implement all provisions of the approved fire protection plan. In addition, the licensee shall maintain the fire protection program set forth in Appendix R to 10 CFR Part 50, except for the following deviations:

INSERT "A"

INSERT A

The licensee shall implement and maintain in effect all provisions of the approved Fire Protection Program as described in the Updated Final Safety Analysis Report for LaSalle County Nuclear Station, and as described in the SERs for NUREG-0519, NUREG-0519 Supplement 2, NUREG-0519 Supplement 3, NUREG-0519 Supplement 5, NUREG-0519 Supplement 7, and NUREG-0519 Supplement 8, subject to the following provision:

The licensee may make changes to the approved Fire Protection Program without prior Commission approval only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

- (i) Hydrostatic hose tests in accordance with NEPA 1962-1979, and
  - (ii) No automatic fire detection systems in areas 2K/3K and 5B4.
- (b) Prior to initial criticality, the licensee shall install a 1-hour rated barrier on all four sides of a partially protected power cable pan and a general sprinkler system, both located in the diesel-generator corridor.
- (c) Prior to startup after the first refueling outage, the licensee shall provide fire protection systems in fire areas 2C/3C, 4C3 and 6E.
- (d) Prior to startup after the first refueling outage, the licensee with respect to fire doors shall implement one of the following:
- (i) Perform an engineering review of the manufacturer's certified doors and door frames by a nationally recognized laboratory to certify that the door and door frames provide the required fire resistance rating, or
  - (ii) Test a replicate "as installed" door assembly by a nationally recognized laboratory to determine the door rating, or
  - (iii) Replace manufacturer's labeled doors and door frames with UL rated items.
- (e) Prior to startup after the first refueling outage, the licensee shall demonstrate the adequacy of its fire protection for record storage.

Am. 14 (26) DELETED  
5/05/83

(27) Industrial Security (Section 13.6, SER, SSER #3)

Am. 65  
4/10/89

CECo shall fully implement and maintain in effect all provisions of the Commission approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain

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## INSTRUMENTATION

### FIRE DETECTION INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

3.3.7.9 As a minimum, the fire detection instrumentation for each fire detection zone of Unit 1 and Unit 2 shown in Table 3.3.7.9-1 shall be OPERABLE.\*

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

#### ACTION:

With the number of OPERABLE fire detection instruments less than the Minimum Instruments OPERABLE requirement of Table 3.3.7.9-1:

- a. 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 primary containment, then inspect the primary containment at least once per 8 hours or monitor the containment air temperature at least once per hour at the locations listed in Specification 4.6.1.7.
- b. Restore the minimum number of instruments to OPERABLE status within 14 days or, prepare and submit a Special Report to the Commission pursuant to Specification 6.6.C within 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the instrument(s) to OPERABLE status.
- c. The provisions of Specification 3.0.3 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.3.7.9.1 Each of the above required fire detection instruments which are accessible during unit 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 unit 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.

4.3.7.9.2 The NFPA Standard 72D supervised circuits supervision associated with the detector alarms of each of the above required fire detection instruments shall be demonstrated OPERABLE at least once per 6 months. Supervised circuits with detectors which are inaccessible during unit operation shall be demonstrated OPERABLE during each COLD SHUTDOWN exceeding 24 hours unless performed in the previous 6 months.

\*The normal or emergency power source may be inoperable in OPERATIONAL CONDITION 4 or 5 or when defueled.

TABLE 3.3.7.9-1

FIRE DETECTION INSTRUMENTATION

<u>INSTRUMENT LOCATION</u>	<u>MINIMUM INSTRUMENTS OPERABLE*</u>		
	<u>HEAT</u>	<u>FLAME</u>	<u>SMOKE</u>
<u>A. Unit 1 Fire Detection Instrumentation</u>			
1. Cable Spreading Room (Dry Pipe Sprinkler System)			21
2. Diesel Generator Corridor (Dry Pipe Sprinkler System)			7
3. Unit 0 Cables Over Lab (Dry Pipe Sprinkler System)			32
4. Diesel Generator (ODG01K) Room (CO <sub>2</sub> Flooding System)	2		
5. Diesel Generator (1DG01K) Room (CO <sub>2</sub> Flooding System)	2		
6. HPCS Diesel Generator Room (CO <sub>2</sub> Flooding System)	2		
7. Control Room Ventilation (VC) Return Air Monitor			
System A			1
System B			1
8. Control Room Ventilation (VC) Outside Air Monitor			
System A			1
System B			1
9. Auxiliary Electric Equipment Room Ventilation (VE) Return Air Monitor			
System A			1
System B			1
10. SGTS Equipment Train			
(1VG01S)	1		
(2VG01S)	1		
11. Control Room Emergency Make-up Air Filter Unit (OVC01SA)	1		
Filter Unit (OVC01SB)	1		
12. Control Room HVAC Supply Air Filter Unit (OVC01FA)	1		
Filter Unit (OVC01FB)	1		
13. Auxiliary Electric Equipment Room HVAC Supply Air Filter Unit (OVE01FA)	1		
HVAC Supply Air Filter Unit (OVE01FB)	1		

TABLE 3.3.7.9-1 (Continued)  
FIRE DETECTION INSTRUMENTATION

<u>INSTRUMENT LOCATION</u>	<u>MINIMUM INSTRUMENTS OPERABLE*</u>		
	<u>HEAT</u>	<u>FLAME</u>	<u>SMOKE</u>
<u>Unit 1 Fire Detection Instrumentation (Continued)</u>			
14. Reactor Bldg./Containment			
a. Refuel Floor, Zone 1-26 El. 843'6", Fire Hazard Zone Area 1		6	
b. Reactor Bldg. East, Zone 1-24 El. 820'6", Fire Hazard Zone 2B1			11
c. Reactor Bldg. West, Zone 1-23 El. 820'6", Fire Hazard Zone 2B2			9
d. Reactor Bldg. South, Zone 1-36 El. 786'6", Fire Hazard Zone 2D			18
e. Reactor Bldg. North, Zone 1-37 El. 786'6", Fire Hazard Zone 2D			17
f. Reactor Bldg. South, Zone 1-34 El. 761', Fire Hazard Zone 2E			22
g. Reactor Bldg. North, Zone 1-35 El. 761', Fire Hazard Zone 2E			18
h. Containment, Zone 1-16P El. 761' and 777', Fire Hazard Zone 2J			7
i. Containment, Zone 1-16 El. 740' and 749', Fire Hazard Zone 2J			9
j. Reactor Bldg., Zone 1-17 El. 740', Fire Hazard Zone 2F			5
k. Reactor Bldg. North, Zone 1-17P El. 740', Fire Hazard Zone 2F			11
l. Reactor Bldg. SW, Zone 1-27 El. 710'6", Fire Hazard Zone 2G			4
m. Reactor Bldg. NW, Zone 1-22P El. 710'6", Fire Hazard Zone 2G			6
n. Reactor Bldg. South, Zone 1-32 El. 694', Fire Hazard Zones 2H1, 2H2, 2H3			17
o. Reactor Bldg. North, Zone 1-33 El. 694', Fire Hazard Zones 2H1, 2H4, 2H5			20
p. Reactor Bldg. South, Zone 1-30 El. 673', Fire Hazard Zones 2I1, 2I2, 2I3			19
q. Reactor Bldg. North, Zone 1-31 El. 673', Fire Hazard Zones 2I1, 2I4, 2I5			20
r. Reactor Bldg. West, Zone 1-40 El. 307', Fire Hazard Zone 2C			7



TABLE 3.3.7.9-1 (Continued)

FIRE DETECTION INSTRUMENTATION

<u>INSTRUMENT LOCATION</u>	<u>MINIMUM INSTRUMENTS OPERABLE*</u>		
	<u>HEAT</u>	<u>FLAME</u>	<u>SMOKE</u>
<u>Unit 1 Fire Detection Instrumentation (Continued)</u>			
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b. Aux. Bldg. Vent Floor, Zone 1-2 El. 786'6", Fire Hazard Zone 4B			8
c. Control Room, Zone 1-5 El. 768', Fire Hazard Zone 4C1			15
d. Computer Room, Zone 1-6 El. 768', Fire Hazard Zone 4C4			8
e. Reactor Prot. M-G Set Room, Zone 1-12 El. 749', Fire Hazard Zone 4D3			12
f. Cable Spreading Area, Zone 1-18 El. 749', Fire Hazard Zone 5A4			15
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h. Aux. Electric Equipment Room, Zone 1-27 El. 731', Fire Hazard Zone 4E1			13
i. Aux. Bldg. Corridor, Zone 1-3 El. 731', Fire Hazard Zone 5B13			5
j. Aux. Bldg. Corridor, Zone 1-7 El. 731', Fire Hazard Zone 5B13			12
k. Div. 1 SWGR Room, Zone 1-9 El. 710'6", Fire Hazard Zone 4F1			17
l. Aux. Bldg. Corridor, Zone 1-4 El. 710'6", Fire Hazard Zone 5C11			9
m. Div. 3 SWGR Room, Zone 1-10 El. 687', Fire Hazard Zone 5D1			5
n. Aux. Bldg. Zone 1-39 El. 768', Fire Hazard Zone 4C2			10
o. Aux. Bldg. Zone 1-38 El. 663', Fire Hazard Zone 6E			8
16. DG Bldg./DG Bldg. Corridor			
a. DG Bldg., Zone 1-29 El. 736'6", Fire Hazard Zones 7A1, 7A2, 7A3			17
b. DG Bldg. Corridor, Zone 1-25 El. 710'6", Fire Hazard Zone 5C11			3
c. DG Bldg., Zone 1-28 El. 674', Fire Hazard Zones 7C4, 7C5, 7C6			15

TABLE 3.3.7.9-1 (Continued)

FIRE DETECTION INSTRUMENTATION

<u>INSTRUMENT LOCATION</u>	<u>MINIMUM INSTRUMENTS OPERABLE*</u>		
	<u>HEAT</u>	<u>FLAME</u>	<u>SMOKE</u>
<u>Unit 1 Fire Detection Instrumentation (Continued)</u>			
17. Off Gas Building			
a. Off Gas Building, Zone 1-15P El. 710'6", Fire Hazard Zone 10A1			3
b. Off Gas Building, Zone 1-15 El. 690', Fire Hazard Zone 10B1			6
<u>B. Unit 2 Fire Detection Instrumentation Required For Unit 1</u>			
1. Cable Spreading Room (Dry Pipe Sprinkler System)			15
2. Diesel Generator Corridor (Dry Pipe Sprinkler System)			9
3. Diesel Generator (2D601K) Room (CO <sub>2</sub> Flooding System)	2		
4. Auxiliary Building/Turbine Bldg.			
a. Aux. Bldg. Vent Floor, Zone 2-1 El. 815', Fire Hazard Zone 4A			5
b. Aux. Bldg. Vent Floor, Zone 2-2 El. 786'6", Fire Hazard Zone 4B			9
c. Control Room, Zone 2-5 El. 769', Fire Hazard Zone 4C1			17
d. Record Room, Zone 2-6 El. 768', Fire Hazard Zone 4C5			3
e. Reactor Prot. M-G Set Room, Zone 2-12 El. 749', Fire Hazard Zone 4D4			12
f. Cable Spreading Area, Zone 2-18 El. 749', Fire Hazard Zone 5A4			13
g. Div. 2 SWGR Room, Zone 2-8 El. 731', Fire Hazard Zone 4E4			15
h. Aux. Electric Equipment Room, Zone 2-27 El. 731', Fire Hazard Zone 4E2			12
i. Aux. Bldg. Corridor, Zone 2-3 El. 731', Fire Hazard Zone 5B13			5
j. Aux. Bldg. Corridor, Zone 2-7 El. 731', Fire Hazard Zone 5B13			12

TABLE 3.3.7.9-1 (Continued)

FIRE DETECTION INSTRUMENTATION

<u>INSTRUMENT LOCATION</u>	<u>MINIMUM INSTRUMENTS OPERABLE*</u>		
	<u>HEAT</u>	<u>FLAME</u>	<u>SMOKE</u>
<u>Unit 2 Fire Detection Instrumentation Required For Unit 2 (Continued)</u>			
k. Div. SWGR Room, Zone 2-9 El. 710'6", Fire Hazard Zone 4F2			17
l. Aux. Bldg. Corridor, Zone 2-4 El. 710'6", Fire Hazard Zone 5C11			9
m. Aux. Bldg., Zone 2-39 El. 768', Fire Hazard Zone 4C3			10
5. DG Bldg./DG Bldg. Corridor			
a. DG Bldg., Zone 2-29 El. 736'6", Fire Hazard Zones 8A1, 8A2			14
b. DG Bldg. Corridor, Zone 2-25 El. 710'6", Fire Hazard Zone 5C11			3
c. DG Bldg., Zone 2-28 El. 674', Fire Hazard Zones 8C3, 8C4, 8C5			11
6. Reactor Bldg.			
a. Refuel Floor, Zone 2-26 El. 843'6", Fire Hazard Zone 1		6	
b. Reactor Bldg. East, Zone 2-24 El. 820'6", Fire Hazard Zone 3B1			11
c. Reactor Bldg. West, Zone 2-40 El. 807', Fire Hazard Zone 3C			7

3.7.5 and 3.7.6 INTENTIONALLY LEFT BLANK. Pages 3/4 7-12 through 3/4 7-23 are Deleted.

PLANT SYSTEMS

3/4.7.5 FIRE SUPPRESSION SYSTEMS

FIRE SUPPRESSION WATER SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.5.1 The fire suppression water system shall be OPERABLE\* with:

- a. Two OPERABLE fire suppression diesel driven fire pumps, each with a capacity of 2500 gpm, with their discharge aligned to the fire suppression header,
- b. An OPERABLE flow path capable of taking suction from the CSCS water tunnel 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, hose standpipe, and the last valve ahead of the deluge valve on each deluge or spray system required to be OPERABLE per Specifications 3.7.5.2 and 3.7.5.4.

APPLICABILITY: At all times.

ACTION:

- a. With one fire pump and/or one water supply inoperable, restore the inoperable equipment to OPERABLE status within 7 days or, prepare and submit a Special Report to the Commission pursuant to Specification 6.6.C within the next 30 days outlining the plans and procedures to be used to restore the inoperable equipment to OPERABLE status or to provide an alternate backup pump or supply. The provisions of Specification 3.0.3 are not applicable.
- b. With the fire suppression water system otherwise inoperable:
  - 1. Establish a backup fire suppression water system within 24 hours, and
  - 2. Prepare and submit a Special Report in accordance with Specification 6.6.C;
    - a) By telephone within 24 hours,
    - b) Confirmed by telegraph, mailgram or facsimile transmission no later than the first working day following the event, and
    - c) In writing within 14 days following the event, outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.

\*The normal or emergency power source may be inoperable in OPERATIONAL CONDITION 4 or 5 or when defueled.

3/4 7-11 (Next page is 3/4 7-24)

## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS

4.7.5.1.1 The fire suppression water 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 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 throughout its operating sequence, and:
  1. Verifying that each automatic valve in the flow path actuates to its correct position,
  2. Verifying that each fire suppression pump develops at least 3750 gpm at a system head of 205 feet,
  3. Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel, and
  4. Verifying that each fire suppression pump starts sequentially to maintain the fire suppression water system pressure greater than or equal to 118 psig.
- d. 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.

4.7.5.1.2 Each diesel driven fire suppression pump shall be demonstrated OPERABLE:

- a. At least once per 31 days by:
  1. Verifying the fuel day tank contains at least 130 gallons of fuel.
  2. Starting:
    - a) The fuel transfer pump and transferring fuel from the storage tank to the day tank.
    - b) The diesel driven pump from ambient conditions and operating for at least 30 minutes on recirculation flow.

## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

- 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.

4.7.5.1.3 Each diesel driven fire pump starting 24-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 pilot cell is above the plates,
  - 2. The pilot cell specific gravity, corrected to 77°F, is greater than or equal to 1.200, and
  - 3. The overall battery voltage is greater than or equal to 24 volts.
- b. At least once per 92 days by verifying that:
  - 1. The voltage of each connected battery is greater than or equal to 25 volts under float charge and has not decreased more than 2.8 volts from the value observed during the original test,
  - 2. The specific gravity, corrected to 77°F, of each connected cell is greater than or equal to 1.200 and has not decreased more than 0.05 from the value observed during the previous test, and
  - 3. The electrolyte level of each connected cell is above the plates.
- c. At least once per 18 months by verifying that:
  - 1. The battery shows no visual indication of physical damage or abnormal deterioration, and
  - 2. Battery terminal connections are clean, tight, free of corrosion and coated with anti-corrosion material.

## PLANT SYSTEMS

### DELUGE AND/OR SPRINKLER SYSTEMS

#### LIMITING CONDITION FOR OPERATION

3.7.5.2 The deluge and sprinkler systems of Unit 1 and Unit 2 shown in Table 3.7.5.2-1 shall be OPERABLE.

APPLICABILITY: Whenever equipment protected by the deluge/sprinkler systems are required to be OPERABLE.

#### ACTION:

- a. With one or more of the deluge and/or sprinkler systems shown in Table 3.7.5.2-1 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; for other areas, establish an hourly fire watch patrol. Restore the system to OPERABLE status within 14 days or, prepare and submit a Special Report to the Commission pursuant to Specification 6.6.C within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.
- b. The provisions of Specification 3.0.3 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.7.5.2 Each of the above required deluge and sprinkler systems shown in Table 3.7.5.2-1 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 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:
  1. 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 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.

\*The normal or emergency power source may be inoperable in OPERATIONAL CONDITION 4 or 5 or when defueled.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

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2. By a visual inspection of the dry pipe sprinkler and deluge headers to verify their integrity, and
  3. By a visual inspection of each deluge nozzle's spray area to verify that 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 and verifying each open head deluge and sprinkler nozzle is unobstructed.



TABLE 3.7.5.2-1

DELUGE AND SPRINKLER SYSTEMS

	<u>Location</u>	<u>Elevation</u>	<u>Fire Zone</u>
A.	<u>Unit 1 Deluge and Sprinkler Systems</u>		
1.	Diesel fuel storage tank (0D001T) room	674'0"	7C3
2.	Diesel fuel storage tank (1D001T) room	674'0"	7C2
3.	HPCS diesel fuel storage tank (1D002T) room	674'0"	7C1
4.	HPCS diesel day tank (1D004T) room	710'6"	7B4
5.	Diesel generator day tank (0D002T) room	710'6"	7B6
6.	Diesel generator day tank (1D002T) room	710'6"	7B5
7.	Cable spreading room	749'0"	4D1
8.	Standby gas treatment system equipment train (1VG 01S)*	820'6"	2B1
9.	Control room emergency makeup filter unit (0VC 01SA)*	786'6"	4B
10.	Control room emergency makeup filter unit (0VC 01SB)*	786'6"	4B
11.	Auxiliary electric equipment room HVAC supply air filter (0VE 01FA)*	786'6"	4B
12.	Auxiliary electric equipment room HVAC supply air filter unit (0VE 01FB)*	786'6"	4B
13.	Control room HVAC supply air filter unit (0VC 01FA)*	786'6"	4B
14.	Control room HVAC supply air filter unit (0VC 01FB)*	786'6"	4B
15.	Standby gas treatment system equipment train (2VG01S)*	820'6"	3B1
16.	Cable areas above laboratories, Unit 0	710'6"	4F3
17.	Diesel generator corridor	710'6"	5C11
18.	Railroad Access Area	710'6"	2G
B.	<u>Unit 2 Deluge and Sprinkler Systems Required For Unit 1</u>		
1.	Diesel fuel storage tank (2D001T) room	674'0"	8C4
2.	Diesel generator day tank (2D002T) room	710'6"	8B4
3.	Cable spreading room	749'0"	4D1
4.	Diesel generator corridor	710'6"	5C11

\*Surveillance Requirements 4.7.5.2.c.1 (a) and (b), 4.7.5.2.c.3 and 4.7.5.2.d are not applicable. Surveillance Requirement 4.7.5.2.c.2 is not applicable to piping within the charcoal beds.

## PLANT SYSTEMS

### CO<sub>2</sub> SYSTEMS

#### LIMITING CONDITION FOR OPERATION

3.7.5.3 The following low pressure CO<sub>2</sub> systems of Unit 1 and Unit 2 shall be OPERABLE.\*

- a. Division 1 diesel generator 0 room.
- b. Division 2 diesel generator 1A room.
- c. Division 3 diesel generator 1B room.
- d. Unit 2 Division 2 diesel generator 2A room.

APPLICABILITY: Whenever equipment protected by the low pressure CO<sub>2</sub> systems is required to be OPERABLE.

#### ACTION:

- a. With one or more of the above required low pressure CO<sub>2</sub> 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; for other areas, establish an hourly fire watch patrol. Restore the system to OPERABLE status within 14 days or, prepare and submit a Special Report to the Commission pursuant to Specification 6.6.C within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.
- b. The provisions of Specification 3.0.3 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.7.5.3 Each of the above required low pressure CO<sub>2</sub> systems shall be demonstrated OPERABLE:

- a. At least once per 7 days by verifying CO<sub>2</sub> storage tank level to be greater than 50% full and pressure to be greater than 290 psig, and
- b. At least once per 31 days by verifying that each valve (manual, power operated, or automatic) in the flow path is in the correct position.
- c. At least once per 18 months by verifying:
  1. The system valves and associated motor operated ventilation dampers actuate, manually and automatically, upon receipt of a simulated actuation signal, and
  2. Flow from each nozzle during a "Puff Test."

\*The normal or emergency power source may be inoperable in OPERATIONAL CONDITION 4 or 5 or when defueled.

## PLANT SYSTEMS

### FIRE HOSE STATIONS

#### LIMITING CONDITION FOR OPERATION

3.7.5.4 The fire hose stations of Unit 1 and Unit 2 shown in Table 3.7.5.4-1 shall be OPERABLE.

APPLICABILITY: 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 3.7.5.4-1 inoperable, route an additional fire hose of equal or greater diameter to the unprotected area(s)/zone(s) from an OPERABLE hose station within 1 hour if the inoperable fire hose is the primary means of fire suppression; otherwise, route the additional hose within 24 hours. Restore the inoperable fire hose station(s) to OPERABLE status within 14 days or, prepare and submit a Special Report to the Commission pursuant to Specification 6.6.C within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.
- b. The provisions of Specification 3.0.3 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.7.5.4 Each of the above required fire hose stations shown in Table 3.7.5.4-1 shall be demonstrated OPERABLE:

- a. At least once per 31 days by a visual inspection of the fire hose stations accessible during plant operation to assure all required equipment is at the station.
- b. At least once per 18 months by:
  1. Visual inspection of the fire hose stations not accessible during plant operation to assure all required equipment is at the station.
  2. Removing the hose for inspection and racking, and
  3. Inspecting all gaskets and replacing any degraded gaskets in the couplings.
- c. At least once per 3 years by partially opening each hose station valve to verify valve OPERABILITY and no flow blockage.
- d. Within 5 years and between 5 and 8 years after purchase date and at least every 2 years thereafter by conducting a hose hydrostatic test at a pressure of 150 psig or at least 50 psig above the maximum fire main operating pressure, whichever is greater.

TABLE 3.7.5.4-1

FIRE HOSE STATIONS

<u>LOCATION</u>	<u>PROTECTED AREA</u>	<u>ELEVATION</u>	<u>HOSE RACK NUMBER</u>
A. <u>Unit 1 Fire Hose Stations</u>			
1. Area 1	Area 1	843'6"	F 101 FB 102 F 103 F 104 F 105
2. Zone 2B1	Zone 2B1	820'6"	FB 108 F 109 F 111
3. Zone 2B2	Zone 2B2	820'6"	FB 107 FB 110
4. Zone 2C	Zone 2C	807'0"	F 112 F 113 F 114
5. Zone 2D	Zone 2D	786'6"	FB 115 F 116 FB 117 F 118
6. Zone 2E	Zone 2E	761'0"	F 119 F 120 F 121 F 122
7. Zone 2F	Zone 2F Zone 2J Zone 2K	740'0"	FB 123 F 124 F 125 F 126 FB 127
8. Zone 2H1	Zone 2H1 Zone 2H2 Zone 2H3 Zone 2H4 Zone 2H5	694'6"	F 135 F 133 F 138 F 140
9. Zone 2H2	Zone 2H2	694'6"	F 134
10. Zone 2H3	Zone 2H3	694'6"	F 136
11. Zone 2H4	Zone 2H4	694'6"	F 139
12. Zone 2H5	Zone 2H5	694'6"	F 137
13. Zone 2I1	Zone 2I1 Zone 2I2 Zone 2I3 Zone 2I4 Zone 2I5	673'4"	FB 141 FB 142 FB 146 FB 148

TABLE 3.7.5.4-1 (Continued)

FIRE HOSE STATIONS

<u>LOCATION</u>	<u>PROTECTED AREA</u>	<u>ELEVATION</u>	<u>IDENTIFICATION HOSE RACK</u>
<u>Unit 1 Fire Hose Stations (Continued)</u>			
14. Zone 2I2	Zone 2I2	673'4"	F 142
15. Zone 2I3	Zone 2I3	673'4"	F 143
16. Zone 2I4	Zone 2I4	673'4"	F 147
17. Zone 2I5	Zone 2I5	673'4"	F 145
18. Zone 4A	Zone 4A	815'0"	FB 149 F 150
19. Zone 4B	Zone 4B	786'6"	F 151 FB 152 F 153
20. Zone 4C2 and 5A3	Zone 4C1 Zone 4C2 Zone 4C3 Zone 4C4 Zone 4C5	768'0"	F 154 FB 175 FB 176
21. Zone 5A4	Zone 5A4 Zone 4D1 Zone 4D2 Zone 4D3	749'0"	FB 248 FB 253
22. Zone 5B3 and 5B13	Zone 5B13 Zone 4E1 Zone 4E2 Zone 4E3 Zone 4E4	731' / 735'	FB 250 FB 155 FB 185
23. Zone 5C11	Zone 5C11 Zone 7B1, 7B2, 7B3 Zone 7B4, 7B5, 7B6 Zone 4F1, 4F3	710'6"	FB 164 FB 192 FB 156 FB 191 FB 157
24. Zone 7A1	Zone 7A1	736'6"	F 162
25. Zone 7A3	Zone 7A2 Zone 7A3	736'6"	F 163
26. Zone 7C4	Zone 7C1 Zone 7C4	673'	FB 165
27. Zone 7C5	Zone 7C2 Zone 7C5	673'	F 166
28. Zone 7C6	Zone 7C3 Zone 7C6	673'	F 167
29. Zone 2G	Zone 2G	710'6"	F 128 F 129 F 130 F 131 F 132

TABLE 3.7.5.4-1 (Continued)

FIRE HOSE STATIONS

<u>LOCATION</u>	<u>PROTECTED AREA</u>	<u>ELEVATION</u>	<u>IDENTIFICATION HOSE RACK</u>
<u>Unit 1 Fire Hose Stations (Continued)</u>			
30. Zone 10A1 Zone 10A2	Zone 10A1	710'6"	FB 205 FB 206 FB 256
31. Zone 10B1	Zone 10B1	690'	FB 207
32. Zone 10C3	Zone 10C3	674'	F 208 F 209
<u>B. Unit 2 Fire Hose Stations Required For Unit 1</u>			
1. Area #1	Area 1	843'6"	F 301 FB 302 F 303 -F 304 F 305
2. Zone 3B1	Zone 3B1	820'6"	FB 308 F 309 F 311
3. Zone 4A	Zone 4A	815'0"	F 349 F 350 FB 368 FB 450
4. Zone 4B	Zone 4B	786'6"	F 351 FB 352 F 353
5. Zone 4C3 and 5A3	Zone 4C1 Zone 4C3 Zone 4C4 Zone 4C5	768'	FB 354 FB 375
6. Zone 5A4	Zone 5A4 Zone 4D2 Zone 4D4	749'	FB 405
7. Zone 5B13	Zone 5B13 Zone 4E2 Zone 4E4	731'	FB 355
8. Zone 8A1 and 8A2	Zone 8A2	736'6"	F 362 F 363
9. Zone 5C11	Zone 5C11 Zone 4F2 Zone 8E2 Zone 8B4	710'6"	FB 357 FB 358 F 359
10. Zone 8C3 and 8C4	Zone 8C2 Zone 8C4	674'	FB 365 F 366

## PLANT SYSTEMS

### 3/4.7.6 FIRE RATED ASSEMBLIES

#### LIMITING CONDITION FOR OPERATION

3.7.6 All fire rated assemblies, including 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 and piping penetration seals and ventilation 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(s) and/or device(s) or verify the OPERABILITY of fire detectors on at least one side of the inoperable assembly(s) and/or sealing device(s) and establish an hourly fire watch patrol. Restore the inoperable fire rated assembly(s) and/or sealing device(s) to OPERABLE status within 7 days or, prepare and submit a Special Report to the Commission pursuant to Specification 6.6.C within the next 30 days outlining the action taken, the cause of the inoperable fire rated assembly(s) and/or sealing device(s) and plans and schedule for restoring the fire rated assembly(s) and/or sealing device(s) to OPERABLE status.
- b. The provisions of Specification 3.0.3 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.7.6.1 Each of the above required fire rated assemblies and sealing devices shall be verified to be OPERABLE at least once per 18 months by performing a visual inspection of:

- a. The exposed surfaces of each fire rated assemblies.
- b. Each fire window/fire damper and associated hardware.
- c. At least 10 percent of each type of sealed penetration. If apparent changes in appearance or abnormal degradations are found, a visual inspection of an additional 10 percent of each type of sealed penetration shall be made. This inspection process shall continue until a 10 percent sample with no apparent changes in appearance or abnormal degradation is found.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

4.7.6.2 Each of the above required fire doors shall be verified OPERABLE by:

- a. Verifying the position of each closed fire door at least once per 24 hours.
- b. Verifying that doors with automatic hold-open and release mechanisms are free of obstructions at least once per 24 hours.
- c. Verifying the position of each locked closed fire door at least once per 7 days.
- d. Verify the OPERABILITY of the fire door supervision system by performing a CHANNEL FUNCTIONAL TEST at least once per 31 days.
- e. Inspecting the automatic hold-open, release and closing mechanism and latches at least once per 6 months.



## INSTRUMENTATION

### BASES

#### MONITORING INSTRUMENTATION (Continued)

##### 3/4.3.7.5 ACCIDENT MONITORING INSTRUMENTATION

The OPERABILITY of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess important variables following an accident. This capability is consistent with the recommendations of Regulatory Guide 1.97, "Instrumentation for Light Water Cooled Nuclear Power Plants to Assess Plant Conditions During and Following an Accident," December 1975 and NUREG-0578, "TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations."

##### 3/4.3.7.6 SOURCE RANGE MONITORS

The source range monitors provide the operator with information of the status of the neutron level in the core at very low power levels during startup and shutdown. At these power levels, reactivity additions should not be made without this flux level information available to the operator. When the intermediate range monitors are on scale adequate information is available without the SRMs and they can be retracted.

##### 3/4.3.7.7 TRAVERSING IN-CORE PROBE SYSTEM

The OPERABILITY of the traversing in-core probe (TIP) system with the specified minimum complement of equipment ensures that the measurements obtained from use of this equipment accurately represent the spatial neutron flux distribution of the reactor core.

The specification allows use of substituted TIP data from symmetric channels if the control rod pattern is symmetric since the TIP data is adjusted by the plant computer to remove machine dependent and power level dependent bias. The source of data for the substitution may also be a 3-dimensional BWR core simulator calculated data set which is normalized to available real data. Since uncertainty could be introduced by the simulation and normalization process, an evaluation of the specific control rod pattern and core operating state must be performed to ensure that adequate margin to core operating limits is maintained.

##### 3/4.3.7.8 DELETED

##### 3/4.3.7.9 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, increasing the frequency of fire watch patrols in the affected areas is required to provide detection capability until the inoperable instrumentation is restored to OPERABILITY.

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## PLANT SYSTEMS

### BASES

#### 3/4.7.4 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 shielded mechanism.

#### 3/4.7.5 FIRE SUPPRESSION SYSTEMS

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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, deluge and/or sprinklers, CO<sub>2</sub> systems, and fire hose stations. 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.

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. The requirement for a twenty-four hour report to the Commission provides for prompt evaluation of the acceptability of the corrective measures to provide adequate fire suppression capability for the continued protection of the nuclear plant.

## PLANT SYSTEMS

### BASES

#### 3/4.7.6 FIRE RATED ASSEMBLIES

Deleted

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.

#### 3/4.7.7 AREA TEMPERATURE MONITORING

The area temperature limitations ensure that safety-related equipment will not be subjected to temperatures in excess of their environmental qualification temperatures. Exposure to excessive temperatures may degrade equipment and can cause loss of its OPERABILITY. The temperature limits include allowance for an instrument error of  $\pm 7^{\circ}\text{F}$ .

#### 3/4.7.8 STRUCTURAL INTEGRITY OF CLASS 1 STRUCTURES

In order to assure that settlement does not exceed predicted and allowable settlement values, a program has been established to conduct a survey at the site. The allowable total differential settlement values are based on original settlement predictions. In establishing these tabulated values, an assumption is made that pipe and conduit connection have been designed to safely withstand the stresses which would develop due to total and differential settlement.

#### 3/4 7.9 SNUBBERS

All snubbers are required OPERABLE to ensure that the structural integrity of the Reactor Coolant System and all other safety-related systems is maintained during and following a seismic or other event initiating dynamic loads. Snubbers excluded from this inspection program are those installed on nonsafety-related systems and then only if their failure or failure of the system on which they are installed, would have no adverse effect on any safety-related system.

Snubbers are classified and grouped by design and manufacturer but not by size. For example, mechanical snubbers utilizing the same design features of the 2-kip, 10-kip, and 100-kip capacity manufactured by Company "A" are of the same type. The same design mechanical snubbers manufactured by Company "B" for the purpose of this Technical Specification would be of a different type, as would hydraulic snubbers from either manufacturer.

A list of individual snubbers with detailed information of snubbers location and size and of system affected shall be available at the plant in accordance with Section 50.71(c) of 10 CFR Part 50. The accessibility of each

## ADMINISTRATIVE CONTROLS

1. At least one licensed Reactor Operator shall be in the control room when fuel is in the reactor. In addition, while the reactor is in OPERATIONAL CONDITION 1, 2 or 3, at least one licensed Senior Reactor Operator who has been designated by the Shift Supervisor to assume the control room direction responsibility shall be in the Control Room.
2. A radiation protection technician\* shall be on site when fuel is in the reactor.
3. 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.
4. Deleted A site Fire Brigade of at least 5 members shall be maintained onsite at all times\*. The Fire Brigade shall not include the Shift Supervisor, the Station Control Room Engineer and the 2 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.
5. The Onsite Nuclear Safety Group (ONSG) shall function to examine unit operating characteristics, NRC issuances, industry advisories, Licensee Event Reports and other sources of plant design and operating experience information, including plants of similar design, which may indicate areas for improving unit safety. The ONSG shall be composed of at least three, dedicated, full-time engineers of multi-disciplines located on site and shall be augmented on a part-time basis by personnel from other parts of the Commonwealth Edison Company organization to provide expertise not represented in the group. The ONSG shall be responsible for maintaining surveillance of unit activities to provide independent verification that these activities are performed correctly and that human errors are reduced as much as practical. The ONSG shall make detailed recommendations for revised procedures, equipment modifications, maintenance activities, operations activities or other means of improving unit safety to the Safety Assessment Manager and the Station Manager.
6. The Station Control Room Engineer (SCRE) may serve as the Shift Technical Advisor (STA) during abnormal operating and accident conditions. During these conditions, the SCRE or other on duty STA shall provide technical support to the Shift Supervisor in the areas of thermal hydraulics, reactor engineering and plant analysis with regard to the safe operation of the unit.

\* The radiation protection technician and Fire Brigade composition may be less than the minimum requirements for a period of time not to exceed two hours in order to accommodate unexpected absence provided immediate action is taken to fill the required positions.

# Not responsible for sign-off feature.

(14) Control of Heavy Loads (Section 9.1, SSER #1, SER #5)

Prior to startup after the first refueling, the licensee shall have made commitments acceptable to the NRC regarding the guidelines of Section 5.1.2 through 5.1.6 of NUREG-0612.

(15) Fire Protection Program (Section 9.5, SER, SSER #2, SSER #3, SSER #5, SSER #7, SSER #8)

- (a) The licensee shall maintain in effect all provisions of the approved fire protection program.
- (b) Prior to initial criticality, the licensee shall replace the B diesel fire pump engine and perform a test in accordance with Sections 11-2.3, 11-2.3 and 11-2.5 of NFPA-20/1983.
- (c) Prior to initial criticality, the licensee shall revise the fire protection loop flow test in accordance with Section 11.3 of NFPA-20/1983 and be conducted on 18-month intervals.
- (d) Prior to initial criticality, the licensee shall revise the fire protection loop flow test in accordance with Chapter 5, Section 11 of the Fire Protection Handbook, 14th Edition published by the National Fire Protection Association.
- (e) Prior to startup after the first refueling outage, the licensee shall replace approximately 110 feet of four-inch pipe feeding the sprinkler system in the cable spreading room with six-inch pipe to effectively reduce the friction loss.
- (f) Prior to exceeding five percent power, the licensee shall provide a history of the deviations observed in operation of the diesel fire pumps.
- (g) Prior to exceeding five percent power, the licensee shall provide the results of an analysis of the service water system's capability to perform as a backup water supply for the fire protection. This analysis will include a description of the surveillance procedures for the service water pump system when used as a fire protection water supply, and an evaluation of limitations on the service water system due to the use of these pumps as a fire water supply.

0011k

INSERT "A"

INSERT A

The licensee shall implement and maintain in effect all provisions of the approved Fire Protection Program as described in the Updated Final Safety Analysis Report for LaSalle County Nuclear Station, and as described in the SERs for NUREG-0519, NUREG-0519 Supplement 2, NUREG-0519 Supplement 3, NUREG-0519 Supplement 5, NUREG-0519 Supplement 7, and NUREG-0519 Supplement 8, subject to the following provision:

The licensee may make changes to the approved Fire Protection Program without prior Commission approval only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

- (h) Prior to exceeding five percent power, the licensee shall provide a surveillance program for NRC staff approval to ensure operability of the fire dampers. This program will include a periodic operability test of a sample population of accessible dampers.
- (i) Prior to exceeding five percent power, the licensee shall assure, in a manner acceptable to the NRC staff, that a fire in a single fire zone will not result in the inadvertent opening of all three high/low pressure interface valves between the reactor core isolation cooling and residual heat removal systems.
- (j) Prior to startup after the first refueling outage, the licensee shall provide the suppression pool level and temperature monitoring instrumentation at the remote shutdown panel which are electrically isolated from the control room, and assure the instrumentation are operable with the necessary surveillance procedures in place.
- (k) Prior to startup after the first refueling outage, the licensee shall assure, in a manner acceptable to the NRC staff, that a fire in any single zone will not affect the control of the fuel oil transfer pumps for diesel generators "O" and "2A".

(16) Industrial Security (Section 13.6, SER, SSER 83, SSER 85)

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CECo shall fully implement and maintain in effect all provisions of the Commission approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27833) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled "LaSalle County Nuclear Station Security Plan," with revisions submitted through June 1, 1986; "LaSalle County Nuclear Power Station Security Personnel Training and Qualification Plan," with revisions submitted through June 13, 1986; and "LaSalle County Nuclear Power Station Safeguards Contingency Plan," with revisions submitted through February 16, 1984. Change made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.

(17) Initial Test Program (Section 14, SER, SSER 87)

The licensee shall conduct the initial startup test program (set forth in Section 14 of the licensee's Final Safety Analysis Report, as amended) without making modifications of this program unless such modifications are in accordance with provisions of 10 CFR Section 50.59. In addition, the licensee

12/16/83

ATTACHMENT 1 TO LASALLE COUNTY UNIT 2 OPERATING LICENSE WFF-18

This attachment identifies certain preoperational tests, system demonstrations and other items which must be completed to the Commission's satisfaction in accordance with the operational plateaus as identified below:

- A. The following items must be completed prior to proceeding to operational Mode 2 (initial criticality):
  1. The following Preoperational Tests shall be completed, including all reviews:
    - a) Containment Monitoring System (PT-CN-201)
    - b) Post LOCA Containment Monitoring System (PT-CN-202)
    - c) Main Steam Isolation Valve Leakage Control System (PT-MS-201A)
    - d) Main Steam Isolation Valves and Main Steam System Instrumentation (PT-MS-201B)
    - e) Off-Gas System (PT-OG-201)
    - f) Reactor Recirculation System (PT-RR-201)
    - g) Post LOCA Hydrogen Recombiners (PT-VP-202)
    - h) Transverse Incore Probe System (PT-IR-202).
  2. Personnel emergency equipment shall be installed in the Reactor Building.
- B. The Preoperational Test for the Containment Ventilation System (PT-VP-203) shall be completed, including all reviews prior to exceeding a primary system temperature of 200°F in Operational Mode 2.
- C. The Preoperational Test for the Automatic Depressurization System and Main Steam System Safety/Relief Valves (PT-MS-201C) shall be completed prior to exceeding a primary system pressure of 350 psig in Operational Mode 2. All reviews of this test shall be completed within one week of completed testing.
- D. The System Demonstration for Pipe Vibration Monitoring (SD-SI-201) shall be completed, including all reviews prior to exceeding 5% of rated full power operation.



E. The following items must be completed for the Fire Protection Program prior to exceeding 5% of rated full power operation:

1. The licensee shall conduct a review of the adequacy of its fire detector system installation. This evaluation shall specifically address the number and location of fire detectors, and ventilation effects on the ability of the detectors to sense a fire. The licensee shall initiate compensatory measures in areas found deficient to assure adequate fire detection capability. These compensatory measures will remain in place until permanent modifications to correct any deficiencies are made to the fire detection system.
2. The licensee shall demonstrate that Emergency Lighting Units with at least an 8-hour battery power supply have been installed and are functionally operable in the Control Room, in the Auxiliary Electric Equipment Room at the Remote Shutdown Panel, and on a dedicated access route from the Control Room to the Auxiliary Electric Equipment Room which will include two egress doors from the Control Room.
3. The licensee shall have in place approved procedures defining egress routes for control room evacuation to the remote shutdown panel.
4. The licensee shall install the rollup door in the Unit 2 Auxiliary Electric Equipment Room.
5. The licensee shall have in place approved procedures for manual override of those ventilation dampers identified in LaSalle Unit 2 ECE-S-763-LA and LaSalle Unit 2 Modification M-1-1-82-311 as requiring such operation during certain fires.
6. The licensee shall meet the breathing air supply requirements specified in 10 CFR 50, Appendix E, Section III.E.
7. The licensee shall provide a redundant fire stop for the penetrations identified as exceeding established and tested cable density criteria.
8. The licensee shall have in place approved surveillance procedures for fire barrier penetration seals, including detailed acceptance criteria.
9. The hose nozzles on the refueling floor will be replaced with nozzles appropriately rated.

10. The licensee shall be in conformance to the fire watch qualification requirements of NFPA 51B.
  11. The licensee shall provide procedures for maintaining the "G" and "2A" diesel generator day tanks at the nominal full position.
- F. The following items must be completed prior to startup following the first refueling outage:
1. The licensee shall complete all modifications to the fire detection system identified as being required.
  2. The licensee shall review the performance of the fire protection system jockey booster pumps and implement any charges required by this review.

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## INSTRUMENTATION

### FIRE DETECTION INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

3.3.7.9 As a minimum, the fire detection instrumentation for each fire detection zone of Unit 1 and Unit 2 shown in Table 3.3.7.9-1 shall be OPERABLE.\*

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

#### ACTION:

With the number of OPERABLE fire detection instruments less than the Minimum Instruments OPERABLE requirement of Table 3.3.7.9-1:

- a. 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 primary containment, then inspect the primary containment at least once per 8 hours or monitor the containment air temperature at least once per hour at the locations listed in Specification 4.6.1.7.
- b. Restore the minimum number of instruments to OPERABLE status within 14 days or, prepare and submit a Special Report to the Commission pursuant to Specification 6.6.C within 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the instrument(s) to OPERABLE status.
- c. The provisions of Specification 3.0.3 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.3.7.9.1 Each of the above required fire detection instruments which are accessible during unit 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 unit 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.

4.3.7.9.2 The NFPA Standard 72D supervised circuits supervision associated with the detector alarms of each of the above required fire detection instruments shall be demonstrated OPERABLE at least once per 6 months. Supervised circuits with detectors which are inaccessible during unit operation shall be demonstrated OPERABLE during each COLD SHUTDOWN exceeding 24 hours unless performed in the previous 6 months.

---

\*The normal or emergency power source may be inoperable in OPERATIONAL CONDITION 4 or 5 or when defueled.

TABLE 3.3.7.9-1

FIRE DETECTION INSTRUMENTATION

<u>INSTRUMENT LOCATION</u>	<u>MINIMUM INSTRUMENTS OPERABLE*</u>		
	<u>HEAT</u>	<u>FLAME</u>	<u>SMOKE</u>
<b>A. <u>Unit 2 Fire Detection Instrumentation</u></b>			
1. Cable Spreading Room (Dry Pipe Sprinkler System)			15
2. Diesel Generator Corridor (Dry Pipe Sprinkler System)			9
3. Unit 0 Cables Over Lab (Dry Pipe Sprinkler System)			32
4. Diesel Generator (0DG01K) Room (CO <sub>2</sub> Flooding System)	2		
5. Diesel Generator (2DG01K) Room (CO <sub>2</sub> Flooding System)	2		
6. HPCS Diesel Generator Room (CO <sub>2</sub> Flooding System)	2		
7. Control Room Ventilation (VC) Return Air Monitor			
System A			1
System B			1
8. Control Room Ventilation (VC) Outside Air Monitor			
System A			1
System B			1
9. Auxiliary Electric Equipment Room Ventilation (VE) Return Air Monitor			
System A			1
System B			1
10. SETS Equipment Train			
(1V001S)	1		
(2V001S)	1		
11. Control Room Emergency Make-up Air			
Filter Unit (OVCO1SA)	1		
Filter Unit (OVCO1SB)	1		
12. Control Room HVAC Supply Air			
Filter Unit (OVCO1FA)	1		
Filter Unit (OVCO1FB)	1		
13. Auxiliary Electric Equipment Room			
HVAC Supply Air Filter Unit (OVED1FA)	1		
HVAC Supply Air Filter Unit (OVED1FB)	1		

TABLE 3.3.7.9-1 (Continued)

FIRE DETECTION INSTRUMENTATION

<u>INSTRUMENT LOCATION</u>	<u>MINIMUM INSTRUMENTS OPERABLE*</u>		
	<u>HEAT</u>	<u>FLAME</u>	<u>SMOKE</u>
<u>Unit 2 Fire Detection Instrumentation (Continued)</u>			
14. Reactor Bldg./Containment			
a. Refuel Floor, Zone 2-25 El. 843'6", Fire Hazard Zone Area 1		6	
b. Reactor Bldg. East, Zone 2-24 El. 820'6", Fire Hazard Zone 3B1			11
c. Reactor Bldg. West, Zone 2-23 El. 820'6", Fire Hazard Zone 3B2			9
d. Reactor Bldg. South, Zone 2-36 El. 786'6", Fire Hazard Zone 30			19
e. Reactor Bldg. North, Zone 2-37 El. 786'6", Fire Hazard Zone 30			17
f. Reactor Bldg. South, Zone 2-34 El. 761', Fire Hazard Zone 3E			23
g. Reactor Bldg. North, Zone 2-35 El. 761', Fire Hazard Zone 3E			11
h. Containment, Zone 2-15P El. 761' and 777', Fire Hazard Zone 3J			"
i. Containment, Zone 2-16 El. 740' and 749', Fire Hazard Zone 3J			9
j. Reactor Bldg., Zone 2-17 El. 740', Fire Hazard Zone 3F			5
k. Reactor Bldg. North, Zone 2-17P El. 740', Fire Hazard Zone 3F			11
l. Reactor Bldg. SW, Zone 2-22 El. 710'6", Fire Hazard Zone 3G			4
m. Reactor Bldg. NW, Zone 2-22P El. 710'6", Fire Hazard Zone 3G			6
n. Reactor Bldg. South, Zone 2-32 El. 694', Fire Hazard Zones 3H1, 3H2, 3H3			17
o. Reactor Bldg. North, Zone 2-33 El. 694', Fire Hazard Zones 3H1, 3H4, 3H5			20
p. Reactor Bldg. South, Zone 2-30 El. 673', Fire Hazard Zones 3I1, 3I2, 3I3			19
q. Reactor Bldg. North, Zone 2-31 El. 673', Fire Hazard Zones 3I1, 3I4, 3I5			20
r. Reactor Bldg. West, Zone 2-40 El. 807', Fire Hazard Zone 3C			7

TABLE 3.3.7.9-1 (Continued)

FIRE DETECTION INSTRUMENTATION

<u>INSTRUMENT LOCATION</u>	<u>MINIMUM INSTRUMENTS OPERABLE*</u>		
	<u>HEAT</u>	<u>FLAME</u>	<u>SMOKE</u>
<u>Unit 2 Fire Detection Instrumentation (Continued)</u>			
15. Auxiliary Building/Turbine Bldg			
a. Aux. Bldg. Vent Floor, Zone 2-1 El. 815', Fire Hazard Zone 4A			5
b. Aux. Bldg. Vent Floor, Zone 2-2 El. 786'6", Fire Hazard Zone 4B			9
c. Control Room, Zone 2-5 El. 768', Fire Hazard Zone 4C1			17
d. Record Room, Zone 2-6 El. 768', Fire Hazard Zone 4C5			3
e. Reactor Prot. M-G Set Room, Zone 2-12 El. 749', Fire Hazard Zone 4D4			12
f. Cable Spreading Area, Zone 2-18 El. 749', Fire Hazard Zone 5A4			13
g. Div. 2 SWGR Room, Zone 2-8 El. 731', Fire Hazard Zone 4E4			15
h. Aux. Electric Equipment Room, Zone 2-27 El. 731', Fire Hazard Zone 4E2			12
i. Aux. Bldg. Corridor, Zone 2-3 El. 731', Fire Hazard Zone 5B13			5
j. Aux. Bldg. Corridor, Zone 2-7 El. 731', Fire Hazard Zone 5B13			12
k. Div. 1 SWGR Room, Zone 2-9 El. 710'6", Fire Hazard Zone 4F2			17
l. Aux. Bldg. Corridor, Zone 2-4 El. 710'6", Fire Hazard Zone 5C11			9
m. Div. 3 SWGR Room, Zone 2-10 El. 687', Fire Hazard Zone 5D2			5
n. Aux. Bldg., Zone 2-39 El. 768'0", Fire Hazard Zone 4C3			10
o. Aux. Bldg., Zone 2-38 El. 663'0", Fire Hazard Zone 6E			8
16. DG Bldg./DG Bldg. Corridor			
a. DG Bldg., Zone 2-29 El. 736'6", Fire Hazard Zones 8A1, 8A2			14

TABLE 3.3.7.9-1 (Continued)

FIRE DETECTION INSTRUMENTATION

<u>INSTRUMENT LOCATION</u>	<u>MINIMUM INSTRUMENTS OPERABLE*</u>		
	<u>HEAT</u>	<u>FLAME</u>	<u>SMOKE</u>
<u>Unit 2 Fire Detection Instrumentation (Continued)</u>			
b. DG Bldg. Corridor, Zone 2-25 El. 710'6", Fire Hazard Zone 9C11			3
c. DG Bldg., Zone 2-28 El. 674', Fire Hazard Zones 8C3, 8C4, 8C5			11
17. Off Gas Building			
a. Off Gas Building, Zone 1-15P El. 710'6", Fire Hazard Zone 10A1			3
b. Off Gas Building, Zone 1-15 El. 690', Fire Hazard Zone 10B1			6
B. <u>Unit 1 Fire Detection Instrumentation Required For Unit 2</u>			
1. Cable Spreading Room (Dry Pipe Sprinkler System)			21
2. Diesel Generator Corridor (Dry Pipe Sprinkler System)			7
3. Diesel Generator (1DG01J) Room (CO <sub>2</sub> Flooding System)	2		
4. Auxiliary Building/Turbine Bldg.			
a. Aux. Bldg., Vent Floor, Zone 1-1 El. 815', Fire Hazard Zone 4A			2
b. Aux. Bldg. Vent Floor, Zone 1-2 El. 786'6", Fire Hazard Zone 4B			8
c. Control Room, Zone 1-5 El. 768', Fire Hazard Zone 4C1			15
d. Computer Room, Zone 1-6 El. 768', Fire Hazard Zone 4C4			8
e. Reactor Prot. M-G Set Room, Zone 1-12 El. 749', Fire Hazard Zone 4D3			12
f. Cable Spreading Area, Zone 1-18 El. 749', Fire Hazard Zone 5A4			15
g. Div. 2 SWGR Room, Zone 1-8 El. 731', Fire Hazard Zone 4E3			15
h. Aux. Electric Equipment Room, Zone 1-27 El. 731', Fire Hazard Zone 4E1			13

TABLE 3.3.7.9-1 (Continued)

FIRE DETECTION INSTRUMENTATION

<u>INSTRUMENT LOCATION</u>	<u>MINIMUM INSTRUMENTS OPERABLE*</u>		
	<u>HEAT</u>	<u>FLAME</u>	<u>SMOKE</u>
<u>Unit 1 Fire Detection Instrumentation Required</u>			
<u>For Unit 2 (Continued)</u>			
1. Aux. Bldg. Corridor, Zone 1-3 El. 731', Fire Hazard Zone 5B13			5
j. Aux. Bldg. Corridor, Zone 1-7 El. 731', Fire Hazard Zone 5B13			12
k. Div. SMGR Room, Zone 1-9 El. 710'6", Fire Hazard Zone 4F1			17
l. Aux. Bldg. Corridor, Zone 1-4 El. 710'6", Fire Hazard Zone 5C11			9
5. DG Bldg./DG Bldg. Corridor			
a. DG Bldg., Zone 1-29 El. 736'6", Fire Hazard Zones 7A1, 7A2, 7A3			17
b. DG Bldg. Corridor, Zone 1-25 El. 710'6", Fire Hazard Zone 5C11			3
c. XG Bldg., Zone 1-28 El. 674', Fire Hazard Zones 7C4, 7C5, 7C6			15
6. Reactor Bldg.			
a. Refuel Floor, Zone 1-26 El. 843'6", Fire Hazard Zone Area 1		6	
b. Reactor Bldg. East, Zone 1-24 El. 820'6", Fire Hazard Zone 2B1			11

TABLE NOTATION

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

PLANT SYSTEMS

3/4.7.5 FIRE SUPPRESSION SYSTEMS

FIRE SUPPRESSION WATER SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.5 and 3.7.6 INTENTIONALLY LEFT BLANK. Pages 3/4 7-12 through 3/4 7-24 are Deleted.

3.7.5.1 The fire suppression water system shall be OPERABLE\* with:

- a. Two OPERABLE fire suppression diesel driven fire pumps, each with a capacity of 2500 gpm, with their discharge aligned to the fire suppression header,
- b. An OPERABLE flow path capable of taking suction from the CSCS water tunnel 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, hose standpipe, and the last valve ahead of the deluge valve on each deluge or spray system required to be OPERABLE per Specifications 3.7.5.2 and 3.7.5.4.

APPLICABILITY: At all times.

ACTION:

- a. With one fire pump and/or one water supply inoperable, restore the inoperable equipment to OPERABLE status within 7 days or, prepare and submit a Special Report to the Commission pursuant to Specification 6.6.C within the next 30 days outlining the plans and procedures to be used to restore the inoperable equipment to OPERABLE status or to provide an alternate backup pump or supply. The provisions of Specification 3.0.3 are not applicable.
- b. With the fire suppression water system otherwise inoperable:
  1. Establish a backup fire suppression water system within 24 hours, and
  2. Prepare and submit a Special Report in accordance with Specification 6.6.C;
    - a) By telephone within 24 hours,
    - b) Confirmed by telegraph, mailgram or facsimile transmission no later than the first working day following the event, and
    - c) In writing within 14 days following the event, outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.

\*The normal or emergency power source may be inoperable in OPERATIONAL CONDITION 4 or 5 or when defueled.



## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS

4.7.5.1.1 The fire suppression water 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 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 throughout its operating sequence, and:
  1. Verifying that each automatic valve in the flow path actuates to its correct position,
  2. Verifying that each fire suppression pump develops at least 3750 gpm at a system head of 205 feet,
  3. Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel, and
  4. Verifying that each fire suppression pump starts sequentially to maintain the fire suppression water system pressure greater than or equal to 118 psig.
- d. 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.

4.7.5.1.2 Each diesel-driven fire suppression pump shall be demonstrated OPERABLE:

- a. At least once per 31 days by:
  1. Verifying the fuel day tank contains at least 130 gallons of fuel.
  2. Starting:
    - a) The fuel transfer pump and transferring fuel from the storage tank to the day tank.
    - b) The diesel-driven pump from ambient conditions and operating for at least 30 minutes on recirculation flow.

## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

- 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.

4.7.5.1.3 Each diesel driven fire pump starting 24-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 pilot cell is above the plates,
  - 2. The pilot cell specific gravity, corrected to 77°F, is greater than or equal to 1.200, and
  - 3. The overall battery voltage is greater than or equal to 24 volts.
- b. At least once per 92 days by verifying that:
  - 1. The voltage of each connected battery is greater than or equal to 25 volts under float charge and has not decreased more than 2.8 volts from the value observed during the original test,
  - 2. The specific gravity, corrected to 77°F, of each connected cell is greater than or equal to 1.200 and has not decreased more than 0.05 from the value observed during the previous test, and
  - 3. The electrolyte level of each connected cell is above the plates.
- c. At least once per 18 months by verifying that:
  - 1. The battery shows no visual indication of physical damage or abnormal deterioration, and
  - 2. Battery terminal connections are clean, tight, free of corrosion and coated with anti-corrosion material.

## PLANT SYSTEMS

### DELUGE AND/OR SPRINKLER SYSTEMS

#### LIMITING CONDITION FOR OPERATION

3.7.5.2 The deluge and sprinkler systems of Unit 1 and Unit 2 shown in Table 3.7.5.2-1 shall be OPERABLE.\*

APPLICABILITY: Whenever equipment protected by the deluge/sprinkler systems are required to be OPERABLE.

#### ACTION:

- a. With one or more of the deluge and/or sprinkler systems shown in Table 3.7.5.2-1 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; for other areas, establish an hourly fire watch patrol. Restore the system to OPERABLE status within 14 days or, prepare and submit a Special Report to the Commission pursuant to Specification 6.6.C within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.
- b. The provisions of Specification 3.0.3 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.7.5.2 Each of the above required deluge and sprinkler systems shown in Table 3.7.5.2-1 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 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:
  1. 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 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.

\*The normal or emergency power source may be inoperable in OPERATIONAL CONDITION 4 or 5 or when defueled.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

2. By a visual inspection of the dry pipe sprinkler and deluge headers to verify their integrity, and
3. By a visual inspection of each deluge nozzle's spray area to verify that 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 and verifying each open head deluge and sprinkler nozzle is unobstructed.

TABLE 3.7.5.2-1

DELUGE AND SPRINKLER SYSTEMS

<u>Location</u>	<u>Elevation</u>	<u>Fire Zone</u>
<b>A. Unit 2 Deluge and Sprinkler Systems</b>		
1. Diesel fuel storage tank (00001T) room	674'0"	7C3
2. Diesel fuel storage tank (20001T) room	674'0"	8C2
3. HPCS diesel fuel storage tank (20002T) room	674'0"	8C1
4. HPCS diesel day tank (20004T) room	710'6"	8B3
5. Diesel generator day tank (00002T) room	710'6"	7B6
6. Diesel generator day tank (20002T) room	710'6"	8B4
7. Cable spreading room	749'0"	402
8. Standby gas treatment system equipment train (1VG 01S) <sup>a</sup>	820'6"	2B1
9. Control room emergency makeup filter unit (OVC 01SA) <sup>a</sup>	786'6"	48
10. Control room emergency makeup filter unit (OVC 01SB) <sup>a</sup>	786'6"	48
11. Auxiliary electric equipment room HVAC supply air filter (OVE 01FA) <sup>a</sup>	786'6"	48
12. Auxiliary electric equipment room HVAC supply air filter unit (OVE 01FB) <sup>a</sup>	786'6"	48
13. Control room HVAC supply air filter unit (OVC 01FA) <sup>a</sup>	786'6"	48
14. Control room HVAC supply air filter unit (OVC 01FB) <sup>a</sup>	786'6"	48
15. Standby gas treatment system equipment train (2VG01S) <sup>a</sup>	820'6"	3B1
16. Cable areas above laboratories, Unit 0	710'6"	4F3
17. Diesel generator corridor	710'6"	5C11
<b>B. Unit 1 Deluge and Sprinkler Systems Required For Unit 2</b>		
1. Diesel fuel storage tank (10001T) room	674'0"	7C2
2. Diesel generator day tank (10002T) room	710'6"	7B5
3. Cable spreading room	749'0"	401
4. Diesel generator corridor	710'6"	5C11

<sup>a</sup>Surveillance Requirements 4.7.5.2.c.1 (a) and (b), 4.7.5.2.c.3 and 4.7.5.2.d are not applicable. Surveillance Requirement 4.7.5.2.c.2 is not applicable to piping within the charcoal beds.

## PLANT SYSTEMS

### CO<sub>2</sub> SYSTEMS

#### LIMITING CONDITION FOR OPERATION

3.7.5.3 The following low pressure CO<sub>2</sub> systems of Unit 1 and Unit 2 shall be OPERABLE.\*

- a. Division 1 diesel generator 0 room.
- b. Division 2 diesel generator 2A room.
- c. Division 3 diesel generator 2B room.
- d. Unit 1 Division 2 diesel generator 1A room.

APPLICABILITY: Whenever equipment protected by the low pressure CO<sub>2</sub> systems is required to be OPERABLE.

#### ACTION:

- a. With one or more of the above required low pressure CO<sub>2</sub> 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; for other areas, establish an hourly fire watch patrol. Restore the system to OPERABLE status within 14 days or, prepare and submit a Special Report to the Commission pursuant to Specification 6.6.C within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.
- b. The provisions of Specification 3.0.3 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.7.5.3 Each of the above required low pressure CO<sub>2</sub> systems shall be demonstrated OPERABLE:

- a. At least once per 7 days by verifying CO<sub>2</sub> storage tank level to be greater than 50% full and pressure to be greater than 290 psig, and
- b. At least once per 31 days by verifying that each valve (manual, power operated, or automatic) in the flow path is in the correct position.
- c. At least once per 18 months by verifying:
  1. The system valves and associated motor operated ventilation dampers actuate, manually and automatically, upon receipt of a simulated actuation signal, and
  2. Flow from each nozzle during a "Puff Test."

\*The normal or emergency power source may be inoperable in OPERATIONAL CONDITION 4 or 5 or when defueled.

## PLANT SYSTEMS

### FIRE HOSE STATIONS

#### LIMITING CONDITION FOR OPERATION

3.7.5.4 The fire hose stations of Unit 1 and Unit 2 shown in Table 3.7.5.4-1 shall be OPERABLE.

APPLICABILITY: 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 3.7.5.4-1 inoperable, route an additional fire hose of equal or greater diameter to the unprotected area(s)/zone(s) from an OPERABLE hose station within 1 hour if the inoperable fire hose is the primary means of fire suppression; otherwise, route the additional hose within 24 hours. Restore the inoperable fire hose station(s) to OPERABLE status within 14 days or, prepare and submit a Special Report to the Commission pursuant to Specification 6.6.C within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.
- b. The provisions of Specification 3.0.3 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.7.5.4 Each of the above required fire hose stations shown in Table 3.7.5.4-1 shall be demonstrated OPERABLE:

- a. At least once per 31 days by a visual inspection of the fire hose stations accessible during plant operation to assure all required equipment is at the station.
- b. At least once per 18 months by:
  1. Visual inspection of the fire hose stations not accessible during plant operation to assure all required equipment is at the station.
  2. Removing the hose for inspection and reracking, and
  3. Inspecting all gaskets and replacing any degraded gaskets in the couplings.
- c. At least once per 3 years by partially opening each hose station valve to verify valve OPERABILITY and no flow blockage.
- d. Within 5 years and between 5 and 8 years after purchase date and at least every 2 years thereafter by conducting a hose hydrostatic test at a pressure of 150 psig or at least 50 psig above the maximum fire main operating pressure, whichever is greater.

TABLE 3.7.5.4-1

FIRE HOSE STATIONS

<u>LOCATION</u>	<u>PROTECTED AREA</u>	<u>ELEVATION</u>	<u>HOSE RACK NUMBER</u>
A. <u>Unit 2 Fire Hose Stations</u>			
1. Area 1	Area 1	843'6"	F 301 FB 302 F 303 F 304 F 305
2. Zone 3A	Zone 3A	832'0"	F306
3. Zone 3E1	Zone 3E1	820'6"	FB 308 F 309 F 311
4. Zone 3E2	Zone 3E2	820'6"	FB 307 FB 310
5. Zone 3C	Zone 3C	807'0"	F 312 F 313 F 314
6. Zone 3D	Zone 3D	786'6"	FB 315 F 316 FB 317 F 318
7. Zone 3E	Zone 3E	761'0"	F 319 F 320 F 321 F 322
8. Zone 3F	Zone 3F Zone 3J Zone 3K	740'0"	FB 323 F 324 F 325 F 326 FB 327
9. Zone 3G	Zone 3G	710'6"	F 328 F 329 F 330 F 331 F 332 F 453
10. Zone 3H	Zone 3H1 Zone 3H2 Zone 3H3 Zone 3H4 Zone 3H5	694'6"	F 333 F 334 F 335 F 336 F 337 F 338 F 339 F 340



TABLE 3.7.5.4-1 (Continued)

FIRE HOSE STATIONS

<u>LOCATION</u>	<u>PROTECTED AREA</u>	<u>ELEVATION</u>	<u>IDENTIFICATION HOSE RACK</u>
<u>Unit 2 Fire Hose Stations (Continued)</u>			
11.	Zone 3I1	Zone 3I1	673'4"
		Zone 3I2	FB 341
		Zone 3I3	FB 344
		Zone 3I4	FB 346
		Zone 3I5	FB 348
		Zone 3I6	
12.	Zone 3I2	Zone 3I2	673'4"
13.	Zone 3I3	Zone 3I2	673'4"
14.	Zone 3I4	Zone 3I4	673'4"
15.	Zone 3I5	Zone 3I5	673'4"
16.	Zone 4A	Zone 4A	815'0"
			FB 349
			F 350
			F 368
17.	Zone 4B	Zone 4B	786'6"
			F 351
			FB 352
			F 353
18.	Zone 4C3 and 5A3	Zone 4C1	768'0"
		Zone 5A2	FB 354
		Zone 4C3	FB 372
		Zone 5A3	FB 451
		Zone 4C5	FB 373
			FB 374
			FB 370
			F 371
			FB 375
			F 377
			FB 452
19.	Zone 5A4	Zone 4D2	749'0"
		Zone 4D4	FB 454
		Zone 5A4	FB 405
20.	Zone 5B3 and 5B13	Zone 5B13	731'/735'
		Zone 5B3	FB 355
		Zone 4E2	
		Zone 4E4	
21.	Zone 5C11	Zone 5C11	710'6"
		Zone 8B1, 8B2, 8B3	FB 357
		Zone 8B4,	F 364
		Zone 4F2, 4F3	FB 386
			FB 387
			FB 389
			FB 390
			FB 391

TABLE 3.7.5.4-1 (Continued)

FIRE HOSE STATIONS

<u>LOCATION</u>	<u>PROTECTED AREA</u>	<u>ELEVATION</u>	<u>IDENTIFICATION HOSE RACK</u>
<u>Unit 2 Fire Hose Stations (Continued)</u>			
22. Zone 8A1	Zone 8A1	736'6"	F 362
23. Zone 8A2	Zone 8A2	736'6"	F 363
24. Zone 8C3	Zone 8C3 Zone 8C1 8C5	673'0"	FB 365
25. Zone 8C4	Zone 8C4 Zone 8C2	673'0"	F 366
26. Zone 6E	Zone 6E	663'0"	F 359 F 360 F 399 F 403 F 404
<u>B. Unit 1 Fire Hose Stations Required For Unit 2</u>			
1. Area 1	Area 1	843'6"	F 101 FB 102 F 103 F 104 F 105
2. Zone 2B1	Zone 2B1	820'6"	FB 108 F 109 F 111
3. Zone 4A	Zone 4A	815'0"	F 150 FB 149
4. Zone 4B	Zone 4B	786'6"	F 151 FB 152 F 153
5. Zone 4C2 and 5A3	Zone 4C1 Zone 4C2 Zone 4C3 Zone 4C4 Zone 4C5	768'0"	F 154 FB 175 FB 176
6. Zone 5A4	Zone 5A4 Zone 4D1 Zone 4D2 Zone 4D3	749'0"	FB 248 FB 253
7. Zone 5B13	Zone 5B13 Zone 5E3 Zone 4E3 Zone 4E2 Zone 4E1	731'0"	FB 250 FB 155 FB 185

TABLE 3.7.5.4-1 (Continued)

FIRE HOSE STATIONS

<u>LOCATION</u>	<u>PROTECTED AREA</u>	<u>ELEVATION</u>	<u>IDENTIFICATION HOSE RACK</u>
<u>Unit 1 Fire Hose Stations Required for Unit 2 (Continued)</u>			
8. Zone 7A3	Zone 7A3 Zone 7A2	736' 8"	F 163
9. Zone 5C11	Zone 5C11 Zone 4F1 Zone 7B2 Zone 7B5 Zone 7B3 Zone 7B6	710' 6"	FB 157 FB 191 FB 164 FB 192 FB 156
10. Zone 7C5 and 7C6	Zone 7C2 Zone 7C3 Zone 7C5 Zone 7C6	673' 0"	FB 165 F 166

## PLANT SYSTEMS

### 3/4.7.6 FIRE RATED ASSEMBLIES

#### LIMITING CONDITION FOR OPERATION

3.7.6 All fire rated assemblies, including 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 and piping penetration seals and ventilation 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(s) and/or device(s) or verify the OPERABILITY of fire detectors on at least one side of the inoperable assembly(s) and/or sealing device(s) and establish an hourly fire watch patrol. Restore the inoperable fire rated assembly(s) and/or sealing device(s) to OPERABLE status within 7 days or, prepare and submit a Special Report to the Commission pursuant to Specification 6.6.C within the next 30 days outlining the action taken, the cause of the inoperable fire rated assembly(s) and/or sealing device(s) and plans and schedule for restoring the fire rated assembly(s) and/or sealing device(s) to OPERABLE status.
- b. The provisions of Specification 3.0.3 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.7.6.1 Each of the above required fire rated assemblies and sealing devices shall be verified to be OPERABLE at least once per 18 months by performing a visual inspection of:

- a. The exposed surfaces of each fire rated assemblies.
- b. Each fire window/fire damper and associated hardware.
- c. At least 10 percent of each type of sealed penetration. If apparent changes in appearance or abnormal degradations are found, a visual inspection of an additional 10 percent of each type of sealed penetration shall be made. This inspection process shall continue until a 10 percent sample with no apparent changes in appearance or abnormal degradation is found.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

4.7.6.2 Each of the above required fire doors shall be verified OPERABLE by:

- a. Verifying the position of each closed fire door at least once per 24 hours.
- b. Verifying that doors with automatic hold-open and release mechanisms are free of obstructions at least once per 24 hours.
- c. Verifying the position of each locked closed fire door at least once per 7 days.
- d. Verify the OPERABILITY of the fire door supervision system by performing a CHANNEL FUNCTIONAL TEST at least once per 31 days.
- e. Inspecting the automatic hold-open, release and closing mechanism and latches at least once per 6 months.

## INSTRUMENTATION

### BASES

#### MONITORING INSTRUMENTATION (Continued)

##### 3/4.3.7.5 ACCIDENT MONITORING INSTRUMENTATION

The OPERABILITY of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess important variables following an accident. This capability is consistent with the recommendations of Regulatory Guide 1.97, "Instrumentation for Light Water Cooled Nuclear Power Plants to Assess Plant Conditions During and Following an Accident," December 1975 and NUREG-0578, "TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations".

##### 3/4.3.7.6 SOURCE RANGE MONITORS

The source range monitors provide the operator with information of the status of the neutron level in the core at very low power levels during startup and shutdown. At these power levels, reactivity additions should not be made without this flux level information available to the operator. When the intermediate range monitors are on scale adequate information is available without the SRMs and they can be retracted.

##### 3/4.3.7.7 TRAVERSING IN-CORE PROBE SYSTEM

The OPERABILITY of the traversing in-core probe (TIP) system with the specified minimum complement of equipment ensures that the measurements obtained from use of this equipment accurately represent the spatial neutron flux distribution of the reactor core.

The specification allows use of substituted TIP data from symmetric channels if the control rod pattern is symmetric since the TIP data is adjusted by the plant computer to remove machine dependent and power level dependent bias. The source of data for the substitution may also be a 3-dimensional BWR core simulator calculated data set which is normalized to available real data. Since uncertainty could be introduced by the simulation and normalization process, an evaluation of the specific control rod pattern and core operating state must be performed to ensure that adequate margin to core operating limits is maintained.

##### 3/4.3.7.8 DELETED

DELETED

##### 3/4.3.7.9 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, increasing the frequency of fire watch patrols in the affected areas is required to provide detection capability until the inoperable instrumentation is restored to OPERABILITY.

##### 3/4.3.7.10 DELETED

## PLANT SYSTEMS

### BASES

#### 3/4.7.4 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 shielded mechanism.

#### 3/4.7.5 FIRE SUPPRESSION SYSTEMS

DELETED

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, deluge and/or sprinklers, CO<sub>2</sub> systems, and fire hose stations. 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.

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. The requirement for a twenty-four hour report to the Commission provides for prompt evaluation of the acceptability of the corrective measures to provide adequate fire suppression capability for the continued protection of the nuclear plant.

## PLANT SYSTEMS

### BASES

#### 3/4.7.6 FIRE RATED ASSEMBLIES

DELETED

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.

#### 3/4.7.7 AREA TEMPERATURE MONITORING

The area temperature limitations ensure that safety-related equipment will not be subjected to temperatures in excess of their environmental qualification temperatures. Exposure to excessive temperatures may degrade equipment and can cause loss of its OPERABILITY. The temperature limits include allowance for an instrument error of  $\pm 7^{\circ}\text{F}$ .

#### 3/4.7.8 STRUCTURAL INTEGRITY OF CLASS 1 STRUCTURES

In order to assure that settlement does not exceed predicted and allowable settlement values, a program has been established to conduct a survey at the site. The allowable total differential settlement values are based on original settlement predictions. In establishing these tabulated values, an assumption is made that pipe and conduit connection have been designed to safely withstand the stresses which would develop due to total and differential settlement.

#### 3/4.7.9 SNUBBERS

All snubbers are required OPERABLE to ensure that the structural integrity of the Reactor Coolant System and all other safety-related systems is maintained during and following a seismic or other event initiating dynamic loads. Snubbers excluded from this inspection program are those installed on nonsafety-related systems and then only if their failure or failure of the system on which they are installed, would have no adverse effect on any safety-related system.

Snubbers are classified and grouped by design and manufacturer but not by size. For example, mechanical snubbers utilizing the same design features of the 2-kip, 10-kip, and 100-kip capacity manufactured by Company "A" are of the same type. The same design mechanical snubbers manufactured by Company "B" for the purpose of this Technical Specification would be of a different type, as would hydraulic snubbers from either manufacturer.



## ADMINISTRATION CONTROLS

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1. At least one licensed Reactor Operator shall be in the control room when fuel is in the reactor. In addition, while the reactor is in OPERATIONAL CONDITION 1, 2 or 3, at least one licensed Senior Reactor Operator who has been designated by the Shift Supervisor to assume the control room direction responsibility shall be in the Control Room.
2. A radiation protection technician\* shall be on site when fuel is in the reactor.
3. 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.
4. Deleted Deleted A site Fire Brigade of at least 5 members shall be maintained onsite at all times\*. The Fire Brigade shall not include the Shift Supervisor, the Station Control Room Engineer and the 2 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.
5. The Onsite Nuclear Safety Group (ONSG) shall function to examine unit operating characteristics, NRC issuances, industry advisories, Licensee Event Reports and other sources of plant design and operating experience information, including plants of similar design, which may indicate areas for improving unit safety. The ONSG shall be composed of at least three, dedicated, full-time engineers of multi-disciplines located on site and shall be augmented on a part-time basis by personnel from other parts of the Commonwealth Edison Company organization to provide expertise not represented in the group. The ONSG shall be responsible for maintaining surveillance of unit activities to provide independent verification that these activities are performed correctly and that human errors are reduced as much as practical. The ONSG shall make detailed recommendations for revised procedures, equipment modifications, maintenance activities, operations activities or other means of improving unit safety to the Safety Assessment Manager and the Station Manager.
6. The Station Control Room Engineer (SCRE) may serve as the Shift Technical Advisor (STA) during abnormal operating and accident conditions. During these conditions, the SCRE or other on duty STA shall provide technical support to the Shift Supervisor in the areas of thermal hydraulics, reactor engineering and plant analysis with regard to the safe operation of the unit.

\* The radiation protection technician and Fire Brigade composition may be less than the minimum requirements for a period of time not to exceed two hours in order to accommodate unexpected absence provided immediate action is taken to fill the required positions.

# Not responsible for sign-off feature.

UNIT 2 LICENSE CONDITIONS - 2.C.(15)

Fire Protection Program (Section 9.5, SER, SSER #2, SSER #3, SSER #5, SSER #7, SSER #8 (NUREG-0519)).

- (a) The licensee shall maintain in effect all provisions of the approved fire protection program.

This License Condition is presently in effect, and will be superseded upon issuance of the standard license condition in accordance with the guidance of GLs 86-10 and 88-12.

- (b) Prior to initial criticality, the licensee shall replace the B diesel fire pump engine and perform a test in accordance with Sections 11-2.3 and 11-2.5 of NFPA-20/1983.

This License Condition was tracked as Open Item (374/81-00-41(DPRP)). The SSER, Supplement 8, page 1-2, states that the B diesel fire pump engine was replaced and tested in accordance with Sections 11-2.3, 11-2.4, and 11-2.5 of NFPA-20/83.

This Open Item was closed by Inspection Report 50-374/84-05(DPRP) dated 4/18/84.

- (c) Prior to initial criticality, the licensee shall revise the fire protection loop flow test in accordance with Section 11.3 of NFPA-20/1983 and be conducted on 18-month intervals.

This License Condition was tracked as Open Item (374/81-00-42(DPRP)). The SSER, Supplement 8, page 1-2, states that the fire pump surveillance tests are in accordance with Section 11.3 of NFPA-20/1983 and will be conducted on 18-month intervals.

This Open Item was closed by Inspection Report 50-374/84-05(DPRP), dated 4/18/84.

Note: the above stated "loop flow test" is an error in nomenclature, it is actually a fire protection pump flow test in accordance with Section 11.3 of NFPA-20/1983, which is conducted on 18-month intervals.

- (d) Prior to initial criticality, the licensee shall revise the fire protection loop

flow test in accordance with Chapter 5, Section 11 of the Fire Protection Handbook, 14th Edition published by the National Fire Protection Association.

This License Condition was tracked as Open Item (374/81-00-43(DPRP)). The SSER, Supplement 8, page 1-2, states that the fire protection loop test has been revised in accordance with Chapter 5, Section 11 of the Fire Protection Handbook, 14th Edition published by the National Fire Protection Association.

This Open Item was closed by Inspection Report 50-374/84-05(DPRP), dated 4/18/84.

- (e) Prior to startup after the first refueling outage, the licensee shall replace approximately 110 feet of four-inch pipe feeding the sprinkler system in the cable spreading room with six-inch pipe to effectively reduce the friction loss.

This License Condition was tracked by Open Item (374/81-00-44(DPRP)). The Open Item was closed by Inspection Report 50-374/84-05(DPRP), dated 4/18/84.

UNIT 2 LICENSE CONDITIONS - 2.C.(15) (continued)

- (f) Prior to exceeding five percent power, the licensee shall provide a history of the deviations observed in operation of the diesel fire pumps.

This License Condition was tracked by Open Item (374/81-00-45(DPRP)). A letter to Mr. Harold R. Denton (NRC) from C.W. Schroeder (Licensee), subject, "LaSalle County Station Units 1 and 2, Deviation Report History for LaSalle County Station's Diesel Fire Pumps from April 17, 1982 to January 1, 1984, NRC Docket Nos. 50-373 and 50-374", dated February 9, 1984, transmitted the history of deviations observed in operation of the diesel fire pumps. The SSER, Supplement 8, page 1-2 states that this License Condition is satisfied.

This Open Item was closed by Inspection Report 50-374/84-05(DPRP), dated 4/18/84.

- (g) Prior to exceeding five percent power, the licensee shall provide the results of an analysis of the service water system's capability to perform as a backup water supply for the fire protection. This analysis will include a description of the surveillance procedures for the service water pump system when used as a fire protection water supply, and an evaluation of limitations on the service water system supply due to the use of these pumps as a fire water supply.

This License Condition was tracked by Open Item (374/81-00-46(DPRP)). Supplement 8 of the SER, pages 1-2 and 1-3 indicates resolution of this License Condition. The NRC staff's review is provided in Section 9.5.1.1 of this Supplement.

This Open Item was closed by Inspection Report 50-374/84-05(DPRP), dated 4/18/84.

- (h) Prior to exceeding five percent power, the licensee shall provide a surveillance program for NRC staff approval to ensure operability of the fire dampers. This program will include a periodic operability test of a sample population of accessible dampers.

This License Condition was tracked by Open Item (374/81-00-47(DPRP)). Supplement 8 of the SER, Section 9.5.2.2, page 9-4, provides the NRC staff's review of the surveillance program submitted by LaSalle Station in a letter dated March 15, 1984. This submittal satisfies this License Condition.

This Open Item was closed by Inspection Report 50-374/84-05(DPRP), dated 4/18/84.

- (i) Prior to exceeding five percent power, the licensee shall assure, in a manner acceptable to the NRC staff, that a fire in a single fire zone will not result in the inadvertent opening of all three high/low pressure interface valves between the reactor core isolation cooling and residual heat removal systems.

This License Condition was tracked by Open Item (374/81-00-48(DPRP)). A letter to Mr. Harold R. Denton (NRC) from C.W. Schroeder (Licensee), subject "LaSalle County Station Units 1 and 2, Fire Protection System Analysis RCIC - RHR, High/Low Pressure Interface, NRC Docket Nos. 50-373 and 50-374", dated March 1, 1984, transmitted Commonwealth Edison Company's review/analysis of a fire in a single fire zone causing the inadvertent opening of high/low pressure interface valves. Supplement 8 of the SER, Section 9.5.6.7, page 9-6, provides the NRC staff's review and approval of this response. Accordingly, this License Condition is satisfied. This Open Item was closed by Inspection Report 50-374/84-05(DPRP), dated 4/18/84.

UNIT 2 LICENSE CONDITIONS - 2.C.(15) (continued)

- (j) Prior to startup after the first refueling outage, the licensee shall provide the suppression pool level and temperature monitoring instrumentation at the remote shutdown panel which are electrically isolated from the control room, and assure the instrumentation are operable with the necessary surveillance procedures in place.

This License Condition was tracked by Open Item (374/81-00-49(DPRP)). This Open Item was closed by Inspection Report 50-374/89021, dated 11/13/89.

- (k) Prior to startup after the first refueling outage, the licensee shall assure, in a manner acceptable to the NRC staff, that a fire in any single zone will not affect the control of the fuel oil transfer pumps for diesel generators "0" and "2A".

This License Condition was tracked as Unresolved Item (374/81-00-50). A modification re-routed the "0" DG fuel oil transfer pump control cables to a different fire zone. Therefore, a fire in any single zone will not affect the control of the fuel oil transfer pumps for diesel generators "0" and "2A".

This Unresolved item was closed by Inspection Report 50-374/86044(DRP), dated 1/28/87.

## UNIT 2 LICENSE CONDITIONS FROM ATTACHMENT 1 TO THE UNIT 2 LICENSE

E. The following items must be completed for the Fire Protection Program prior to exceeding 5% of rated full power operation:

1. The licensee shall conduct a review of the adequacy of its fire detector system installation. This evaluation shall specifically address the number and location of fire detectors, and ventilation effects on the ability of the detectors to sense a fire. The licensee shall initiate compensatory measures to areas found deficient to assure adequate fire detection capability. These compensatory measures will remain in place until permanent modifications to correct any deficiencies are made to the fire detection system.
2. The licensee shall demonstrate that Emergency Lighting Units with at least an 8-hour battery power supply have been installed and are functionally operable in the Control Room, in the Auxiliary Electric Equipment Room at the Remote Shutdown Panel, and on a dedicated access route from the Control Room to the Auxiliary Electric Equipment room which will include two egress doors from the Control Room.
3. The licensee shall have in place approved procedures defining egress routes for Control Room evacuation to the Remote Shutdown Panel.
4. The licensee shall install the rollup door in the Unit 2 Auxiliary Electric Equipment Room.
5. The licensee shall have in place approved procedures for manual override of those ventilation dampers identified in LaSalle Unit 2 ECN-M-763-LA and LaSalle Unit 1 Modification M-1-1-82-311 as requiring such operation during certain fires.
6. The licensee shall meet the breathing air supply requirements specified in 10 CFR 50, Appendix R, Section III.H.
7. The licensee shall provide a redundant fire stop for the penetrations identified as exceeding established and tested cable density criteria.
8. The licensee shall have in place approved surveillance procedures for fire barrier penetration seals, including detailed acceptance criteria.
9. The hose nozzles on the refueling floor will be replaced with nozzles appropriately rated.
10. The licensee shall be in conformance to the fire watch qualification requirements of NFPA 51B.
11. The licensee shall provide procedures for maintaining the "0" and "2A" diesel generator day tanks at the nominal full position.

This License Condition was tracked as Open Item (374/81-00-56(DPRP)). The NRC inspector verified that all eleven items were completed prior to Unit 2 reaching 5% of rated power.

This Open Item was closed by Inspection Report 50-374/84-05(DPRP), dated 4/18/84.

UNIT 2 LICENSE CONDITIONS FROM ATTACHMENT 1 TO THE UNIT 2 LICENSE (continued)

F. The following items must be completed prior to startup following the first refueling outage:

1. The licensee shall complete all modifications to the fire detection system identified as being required.

This License Condition was tracked as Open Item (374/81-00-28DPRP)). Per Safety Evaluation Report (NUREG-0519), Supplement 8, page 1-2, Condition F of Attachment 1 to License NPF-18 is completed.

2. The licensee shall review the performance of the fire protection system jockey booster pumps and implement any changes required by this review.

This License Condition was tracked as Open Item (374/81-00-57). This License Condition was closed by Inspection Report 50-374/89021, dated 11/13/89.

**This proposed amendment does not involve a significant relaxation of the criteria used to establish safety limits, a significant relaxation of the bases for the limiting safety system settings or a significant relaxation of the bases for the limiting conditions for operations. Therefore, based on the guidance provided in the Federal Register and the criteria established in 10 CFR 50.92(c), the proposed change does not constitute a significant hazards consideration.**

## ATTACHMENT C

### ENVIRONMENTAL ASSESSMENT

Commonwealth Edison has evaluated the proposed amendment against the criteria for identification of licensing and regulatory actions requiring environmental assessment in accordance with 10 CFR Part 51.21. It has been determined that the proposed changes meet the criteria for categorical exclusion as provided for under 10 CFR Part 51.22(c)(9). This conclusion has been determined because the changes requested do not pose significant hazards considerations or do not involve a significant increase in the amounts, and no significant changes in the types of any effluents that may be released off-site. Additionally, this request does not involve a significant increase in individual or cumulative occupational radiation exposure.



ATTACHMENT D  
PROPOSED CHANGES TO TECHNICAL SPECIFICATIONS,  
FACILITY OPERATING LICENSES NPF-11 AND NPF-18  
LASALLE COUNTY STATION UNITS 1 & 2

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UNIT 1 LICENSE CONDITIONS - 2.C.(25)

Fire Protection Program (Section 9.5, SER, SSER #2, SSER #3 (NUREG-0519)).

- (a) The licensee shall maintain in effect and fully implement all provisions of the approved fire protection plan. In addition, the licensee shall maintain the fire protection program set forth in Appendix R to 10 CFR Part 50, except for the following deviations:

- (i) Hydrostatic hose tests in accordance with NEPA 1962-1979, and
- (ii) No automatic fire detection systems in areas 2K/3K and 5B4.

This License Condition is presently in effect, and will be superseded upon issuance of the standard license condition in accordance with the guidance of GLs 86-10 and 88-12.

- (b) Prior to initial criticality, the licensee shall install a 1-hour rated barrier on all four sides of a partially protected power cable pan and a general sprinkler system, both located in the diesel-generator corridor.

A general fire sprinkler system and a designed and installed fire protection system were done under Modifications 1-1-82-035, and 1-1-82-055 for the Unit 1 and Unit 2 diesel generator corridors. The NRC staff confirmed, per Section 1.1 of the LaSalle Safety Evaluation Report (NUREG-0519), Supplement 4, that the additional fire protection in the diesel generator corridor had been added prior to exceeding 5 percent power as required by this License Condition.

This License Condition was closed by Inspection Report 50-373/88018(DRP) dated 8/16/88.

- (c) Prior to startup after the first refueling outage, the licensee shall provide fire protection systems in fire areas 2C/3C, 4C3 and 6E.

This License Condition was tracked by Open Item (373/81-00-120(DRP)). The additional fire detection zones were installed under Modification 1-1-82-289. Amendment 44 to License NPF-11 was approved June 20, 1986. The NRC inspector verified that fire protection requirements of this License Condition were met. This Open Item was closed by Inspection Report 50-373/86035(DRP), dated 10/29/86.

- (d) Prior to startup after the first refueling outage, the licensee with respect to fire doors, shall implement one of the following:

- (i) Perform an engineering review of the manufacturer's certified doors and door frames by a nationally recognized laboratory to certify that the door and frames provide the required fire resistance rating, or
- (ii) Test a replicate "as installed" door assembly by a nationally recognized laboratory to determine the door rating, or

UNIT 1 LICENSE CONDITIONS - 2.C.(25) (continued)

(iii) Replace manufacturer's labeled doors and door frames with UL rated items.

This License Condition was tracked by Open Item (373/8100-130). This Open Item was closed by Inspection Report 50-373/86046(DRP), dated 2/18/87.

(e) Prior to startup after the first refueling outage, the licensee shall demonstrate the adequacy of its fire protection for record storage.

The Non-Compliance Item was closed by Inspection Report 50-373/83-12(DPRP), dated 6/13/83. The License Condition was closed by Inspection Report 373/83-25(DPRP), dated 8/3/83.

- (b) A prelube pump, powered from a reliable direct current power supply, be installed in the system to operate in parallel with the engine-driven lube oil pump, or an alternative acceptable to the NRC shall be installed to preclude dry-starting of the diesel-engine.
- (c) Controls and monitoring instrumentation be removed from the engine and engine skid, except instruments qualified for this location. The non-qualified control and monitoring instruments shall be installed on a free standing floor mounted panel and located on a vibration free floor area. If the floor is not vibration free, the panel shall be equipped with vibration mounts.

(22) Direct Current Power Systems (Section 8.3.1.2, SER)

Prior to startup after the first refueling outage for the 125 and 250-volt direct current systems for Divisions 1 and 2 and the 125-volt Division 3 direct current system, the following additional instrumentation shall be provided in the control room: (1) Battery current (ammeter-charge/discharge), (2) Battery charger output voltage (voltmeter), (3) Battery charger output current (ammeter), (4) Battery high discharge rate alarm, and (5) Battery charger trouble alarm. In the interim, the licensee shall implement approved procedures to monitor battery current, battery charger output voltage, and battery charger output current at the local panels at least once per eight hour shift.

(23) Reactor Containment Electrical Penetrations (Section 8.4.1, SER)

Prior to startup after the first refueling outage, a redundant fault current device (circuit breakers or fuses) shall be provided on each penetrating circuit that would limit a fault current surge to be less than the surge for which the penetration is qualified except for low energy (milliamps) instrument systems.

(24) Separation of Class 1E and Non-Class 1E Cable Trays (Section 8.4.6.1, SER, SSER #1, SSER #2)

Prior to startup after the first refueling outage, the licensee shall provide adequate separation or barriers between Class 1E and adjacent non-Class 1E cable trays.

(25) Fire Protection Program (Section 9.5, SER, SSER #2, SSER #3)

- (a) The licensee shall maintain in effect and fully implement all provisions of the approved fire protection plan. In addition, the licensee shall maintain the fire protection program set forth in Appendix R to 10 CFR Part 50, except for the following deviations:

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INSERT "A"

INSERT A

The licensee shall implement and maintain in effect all provisions of the approved Fire Protection Program as described in the Updated Final Safety Analysis Report for LaSalle County Nuclear Station, and as described in the SERs for NUREG-0519, NUREG-0519 Supplement 2, NUREG-0519 Supplement 3, NUREG-0519 Supplement 5, NUREG-0519 Supplement 7, and NUREG-0519 Supplement 8, subject to the following provision:

The licensee may make changes to the approved Fire Protection Program without prior Commission approval only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

- (i) Hydrostatic hose tests in accordance with NEPA 1962-1979, and
  - (ii) No automatic fire detection systems in areas 2K/3K and 5B4.
- (b) Prior to initial criticality, the licensee shall install a 1-hour rated barrier on all four sides of a partially protected power cable pan and a general sprinkler system, both located in the diesel-generator corridor.
- (c) Prior to startup after the first refueling outage, the licensee shall provide fire protection systems in fire areas 2C/3C, 4C3 and 6E.
- (d) Prior to startup after the first refueling outage, the licensee with respect to fire doors shall implement one of the following:
- (i) Perform an engineering review of the manufacturer's certified doors and door frames by a nationally recognized laboratory to certify that the door and door frames provide the required fire resistance rating, or
  - (ii) Test a replicate "as installed" door assembly by a nationally recognized laboratory to determine the door rating, or
  - (iii) Replace manufacturer's labeled doors and door frames with UL rated items.
- (e) Prior to startup after the first refueling outage, the licensee shall demonstrate the adequacy of its fire protection for record storage.

Am. 14 (26) DELETED  
5/05/83

(27) Industrial Security (Section 13.6, SER, SSER #3)

Am. 65  
4/10/89

CECo shall fully implement and maintain in effect all provisions of the Commission approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain

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