

February 10, 1989

Docket Nos.: 50-361 and 50-362

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Gentlemen:

SUBJECT: ERRATA FOR AMENDMENTS 69 and 58 (TAC NOS. 68385, 68386, 68387
AND 68388)

On January 20, 1989, amendments were issued to Facility Operating Licenses NPF-10 and NPF-15 for San Onofre Nuclear Generating Station Units 2 and 3, respectively. The amendments were incorrectly designated Amendments 69 and 38. The correct amendment numbers are 69 and 58. Other typographical and administrative errors in the amendments have been brought to our attention. The enclosed replacement pages correct the errors.

We apologize for any inconvenience caused by these errors.

Sincerely,

original signed by

Donald E. Hickman, Project Manager
Project Directorate V
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation

Enclosure
Corrected pages for
Amendments 69 and 58

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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A handwritten signature in cursive script, appearing to read "Donald E. Hickman", is written over the typed name.

Donald E. Hickman, Project Manager
Project Directorate V
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation

Enclosure
Corrected pages for
Amendments 69 and 58

Mr. Kenneth P. Baskin
Southern California Edison Company

San Onofre Nuclear Generating
Station, Units 2 and 3

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ERRATA

AMENDMENTS 69 AND 58 SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3

The following pages should be replaced with the attached revised pages.

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TABLE 3.3-11
FIRE DETECTION INSTRUMENTS

Fire Area/Zone	Instrument Location	Early Warning	Actuation
2-CO-15-1A*	Reactor Coolant Pump 002		8
	Reactor Coolant Pump 004		8
2-CO-15-1B*	Reactor Coolant Pump 001		8
	Reactor Coolant Pump 003		8
2-CO-15-1C*	Containment Area Quadrants 1, 2, 3 and 4 Elevation 30'-0"	4	
	Elevation 45'-0"	9	
	Charcoal Filter Elevation 45'-0"	1**	
2-CO-63-1D*	Operating Floor Elevation 63'-0"	10	
2-PE-9-2A	Penetration Bldg Elevation 9'-0"	4	
2-PE-(-18)-2B	Penetration Bldg Piping Area Elevation (-)18'-0"	2	
2-PE-30-2C	Penetration Bldg Piping Area Elevation 30'-0"	7	
	Charcoal Filter	1**	
2-PE-30-2D	Penetration Bldg Piping Area Elevation 30'-0"	2	
2-PE-45-3A	Penetration Bldg Electrical Penetration Area Elevation 45'-0"	7	
2-PE-63-3B	Penetration Bldg Electrical Penetration Area Elevation 63'-0"	12	

TABLE 3.3-11 (Continued)
FIRE DETECTION INSTRUMENTS

Fire Area/Zone	Instrument Location	Early Warning	Actuation
2-AC-9-5	Auxiliary Control Bldg Cable Spreading Room Elevation 9'-0"	17	36
2-AC-9-13	Auxiliary Control Bldg Lighting Switchgear Room Elevation 9' -0"	2	
2-AC-9-14	Auxiliary Control Bldg Cable Riser Gallery Elevation 9'-0"	7	45
2-AC-30-20C	Auxiliary Control Bldg Computer Room 2 Elevation 30' -0"	6	
2-AC-30-28	Auxiliary Control Bldg Cable Riser Gallery Elevation 30'-0"	3	53
2-AC-50-35	Auxiliary Control Bldg Switchgear Room 2B Elevation 50'-0"	2	
2-AC-50-36	Auxiliary Control Bldg Cable Riser Gallery Elevation 50'-0"	1	13
2-AC-50-37	Auxiliary Control Bldg Cable Riser Gallery Elevation 50'-0"	2	29
2-AC-50-38	Auxiliary Control Bldg HVAC Room 2A Elevation 50'-0"	1	
2-AC-50-39	Auxiliary Control Bldg HVAC Room 2B Elevation 50'-0"	1	
2-AC-50-40	Auxiliary Control Bldg Switchgear Room 2A Elevation 50'-0"	2	
2-AC-50-41	Auxiliary Control Bldg Distribution Room Elevation 50' -0"	1	

TABLE 3.7-5 (Continued)

SAFETY-RELATED SPRAY AND/OR SPRINKLER SYSTEMS

Fire Area/Zone	Location of Protection	System Identifier	Type
2-CT-16-142C	Cable Shaft	SA2301MU474	Deluge-Water Spray
2-DG-30-155	Diesel Generator Rm B Elevation 30'-0"	SA2301MU468	Pre-Action Sprinkler
2-DG-30-158	Diesel Generator Rm A Elevation 30'-0"	SA2301MU469	Pre-Action Sprinkler
2-TK-30-161A	Auxiliary Feedwater Pump Room Elevation 30'-0"	S22301MU498 S22301MU499	Pre-Action Sprinkler Deluge-Water Spray
<u>COMMON</u>			
2-AC-9-16	Corridor Elevation 9'-0"	SA2301MU461	Wet Pipe
2-AC-30-23	Emergency AC Unit E-418 Charcoal Filter A-207	SA2301MU346 SA2301MU347	Manually Activated Deluge-Water Spray Manually Activated Deluge-Water Spray
2-AC-30-26	Emergency AC Unit E-419 Fan Room Elevation 30'-0" Charcoal Filter A-206	SA2301MU235 SA2301MU450 SA2301MU234	Manually Activated Deluge-Water Spray Wet Pipe Manually Activated Deluge-Water Spray
2-AC-30-27	Corridor Elevation 30'-0"	SA2301MU450	Wet Pipe
2-AC-50-29	Lobby/Monitor Control Room	SA2301MU455	Wet Pipe
2-AC-70-64*	Corridor Elevation 70'-0"	SA2301MU454	Wet Pipe
2-TB-(-9)-148E	Saltwater Cooling Tunnel	SA2301MU583 SA2301MU495	Wet Pipe

*Area/Zone 2-AC-70-64 after Revision 4 of UFHA.

PLANT SYSTEMSFIRE HOSE STATIONSLIMITING CONDITION FOR OPERATION

3.7.8.3 The fire hose stations shown in Table 3.7-6 shall be OPERABLE.

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

ACTION:

- a.1. With one or more of the fire hose stations shown in Table 3.7-6 inoperable, route a fire hose* to provide equivalent nozzle flow capacity to the unprotected area(s) from an OPERABLE hose station or alternate fire water supply, within 1 hour if the inoperable fire hose is the primary means of fire suppression; otherwise provide the additional hose within 24 hours. Where it can be demonstrated that the physical routing of the fire hose would result in a recognizable hazard to operating technicians, plant equipment, or the hose itself, a fire hose shall be stored in an area easily accessible to the unprotected area. Signs identifying the purpose and location of the fire hose shall be mounted above the hose and at the inoperable hose station.
- a.2. With one or more of the above required hose stations inside containment inoperable and the equipment hatch closed, restore the hose station(s) to OPERABLE status within 24 hours or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 7 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 Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.8.3 Each of the fire hose stations shown in Table 3.7-6 shall be demonstrated OPERABLE:

- a. At least once per 31 days by visual inspection of the stations accessible during plant operation to assure all required equipment is at the station.

*Fire hose will be run within 1 hour of entering the ACTION statement when an operable water supply is not available within 250 feet of the inoperable hose station(s) or 2-150 ft. hose packs (1-3/4") on the fire truck are not operable. Fire hose will be supplied by the fire brigade responding to a fire if an operable water supply is available within 250 feet of the inoperable hose station(s).

TABLE 3.7-6
FIRE HOSE STATIONS (Continued)

LOCATION	FIRE AREA/ZONE	ELEVATION	STATION NO.
Lobby - Motor Control Room Auxiliary Control	2-AC-50-29	50'0"	57
Lobby - Motor Control Room Auxiliary Control	2-AC-50-29	50'0"	56
Lobby Auxiliary Control	2-AC-50-29	50'0"	54, 62
Corridor Auxiliary	2-AC-70-64*	70'0"	51, 55, 58, 59
Office Area Auxiliary Control	2-AC-70-64*	70'0"	63
Roof (To Electrical Switchgear Room) Auxiliary Control	2-AC-85-70	85'0"	43
Roof (To Electrical Switchgear Room) Auxiliary Control	2-AC-85-71	85'0"	42

*Area/Zone 2-AC-70-64 after Revision 4 of UFHA.

PLANT SYSTEMS

3/4.7.9 FIRE RATED ASSEMBLIES

LIMITING CONDITION FOR OPERATION

3.7.9 All fire rated assemblies* separating redundant equipment or cable which could affect the ability to achieve and maintain safe shutdown in the event of a fire, or defining areas of the plant which have specific BTP 9.5-1, Appendix A, Section F rating requirements, and all penetration sealing devices** in the above barriers shall be OPERABLE.

APPLICABILITY: At all times when the equipment protected by the fire barrier is required to be OPERABLE.

ACTION:

- a. With one or more of the above required fire rated assemblies inoperable, establish a roving fire watch patrol for areas with detection and/or area/zone wide suppression equipment operable on one side within one hour.*** For area(s) with no detection or suppression equipment operable on one side, establish a continuous fire watch.***
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

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

- a. Verifying at least once per 24 hours the position of each closed fire door and that doors with automatic hold-open and release mechanisms are free of obstructions.
- b. Verifying at least once per 7 days the position of each locked closed fire door.

*Rated walls, non-rated (heavy concrete) walls, floor/ceilings, raceway enclosures and other fire barriers.

**Fire doors, fire windows, fire dampers, seismic gap seals, cable, ventilation duct and piping penetration seals.

***Not required for areas that pose temporary radiation and/or life-threatening safety hazards. If the fire watch/patrol cannot be restored within 24 hours, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 7 days outlining the action taken, the cause of the hazard and the plans and schedule for restoring the required fire watch/patrol.

INSTRUMENTATION

BASES

room. This capability is required in the event control room habitability is lost and is consistent with General Design Criteria 19 of 10 CFR 50.

The OPERABILITY of the remote shutdown instrumentation in Panel L411 ensures that sufficient capability is available to permit shutdown and maintenance of COLD SHUTDOWN of the facility in the event of a fire in the cable spreading room, control room or remote shutdown panel, L042.

3/4.3.3.6 ACCIDENT MONITORING INSTRUMENTATION

The OPERABILITY of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables following an accident. This capability is consistent with the recommendations of Regulatory Guide 1.97, "Instrumentation for Light-Water-Cooled Nuclear 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".

The containment high range area monitors (RU-148 & RU-149) and the main steamline radiation monitors (RU-139 A&B and RU-140 A&B) are in Table 3.3-6. The high range effluent monitors and samplers (RU-142, RU-144 and RU-146) are in Table 3.3-13. The containment hydrogen monitors are in Specification 3/4.6.5.1. The Post Accident Sampling System (RCS coolant) is in Table 3.3-6.

The Subcooled Margin Monitor (SMM), the Heated Junction Thermocouple (HJTC), and the Core Exit Thermocouples (CET) comprise the Inadequate Core Cooling (ICC) instrumentation required by Item II.F.2 NUREG-0737, the Post TMI-2 Action Plan. The function of the ICC instrumentation is to enhance the ability of the plant operator to diagnose the approach to existence of, and recovery from ICC. Additionally, they aid in tracking reactor coolant inventory. These instruments are included in the Technical Specifications at the request of MRC Generic Letter 83-37. These are not required by the accident analysis, nor to bring the plant to Cold Shutdown.

In the event more than four sensors in a Reactor Vessel Level channel are inoperable, repairs may only be possible during the next refueling outage. This is because the sensors are accessible only after the missile shield and reactor vessel head are removed. It is not feasible to repair a channel except during a refueling outage when the missile shield and reactor vessel head are removed to refuel the core. If only one channel is inoperable, it should be restored to OPERABLE status in a refueling outage as soon as reasonably possible. If both channels are inoperable, both channels shall be restored to OPERABLE status in the nearest refueling outage. In the event that both HJTC channels are inoperable, existing plant instruments and operator training will be used as an alternate method of monitoring the reactor vessel inventory.

INSTRUMENTATIONBASES3/4.3.3.7 FIRE DETECTION INSTRUMENTATION

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

In the event that less than 50% of the fire detection instrumentation is inoperable in any fire area/zone, the establishment of frequent fire patrols in the affected areas is required to provide detection capability until the inoperable instrumentation is restored to OPERABLE.

Since the fire detectors are non-seismic, a plant visual inspection for fires is required within two hours following an earthquake ($\geq 0.05g$). Since safe shutdown systems are protected by seismic Category I barriers, any fire after an earthquake should be detected by this inspection before safe shutdown systems would be affected. Additionally, to verify the continued OPERABILITY of fire detection systems after an earthquake, an engineering evaluation of the fire detection instrumentation in the required zones is required to be performed within 72 hours following an earthquake.

3/4.3.3.8 RADIOACTIVE LIQUID EFFLUENT INSTRUMENTATION

The radioactive liquid effluent instrumentation is provided to monitor and control, as applicable, the releases of radioactive materials in liquid effluents during actual or potential releases of liquid effluents. The alarm/trip setpoints for these instruments shall be calculated in accordance with the procedures in the ODCM to ensure that the alarm/trip will occur prior to exceeding the limits of 10 CFR Part 20. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60, 63 and 64 of Appendix A to 10 CFR Part 50.

3/4.3.3.9 RADIOACTIVE GASEOUS EFFLUENT INSTRUMENTATION

The radioactive gaseous effluent instrumentation is provided to monitor and control, as applicable, the releases of radioactive materials in gaseous effluents during actual or potential releases of gaseous effluents. The alarm/trip setpoints for these instruments shall be calculated in accordance with the procedures in the ODCM to ensure that the alarm/trip will occur prior to exceeding the limits of 10 CFR Part 20. This instrumentation also includes provisions for monitoring and controlling the concentrations of potentially explosive gas mixtures in the waste gas holdup system. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60, 63 and 64 of Appendix A to 10 CFR Part 50.

3/4.3.3.10 LOOSE-PART DETECTION INSTRUMENTATION

The OPERABILITY of the loose-part detection instrumentation ensures that sufficient capability is available to detect loose metallic parts in the primary system and avoid or mitigate damage to primary system components. The

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TABLE 3.3-9

REMOTE SHUTDOWN MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>READOUT LOCATION</u>	<u>CHANNEL RANGE</u>	<u>MINIMUM CHANNELS OPERABLE</u>
1. Log Power Level	*	10 ⁻⁸ - 200%	1
2. Reactor Coolant Cold Leg Temperature	#	0-700°F(a)	1
3. Pressurizer Pressure	*	0-3000 psia	1
4. Pressurizer Level	*	0-100%	1
5. Steam Generator Pressure	*	0-1200 psia	1/steam generator
6. Steam Generator Level	*	0-100%	1/steam generator
7. Source Range Neutron Flux	*	10 ⁻¹ -10 ⁵ cps	1
8. Condenser Vacuum	*	0-5" Hg	1
9. Volume Control Tank Level	*	0-100%	1
10. Letdown Heat Exchanger Pressure	*	0-600 psig	1
11. Letdown Heat Exchanger Temperature	*	0-200°F	1
12. Boric Acid Makeup Tank Level	*	0-100%	1
13. Condensate Storage Tank Level	*	0-100%	1
14. Reactor Coolant Hot Leg Temperature	#	0-700°F(b)	1
15. Pressurizer Pressure - Low Range	#	0-1600 psia	1
16. Pressurizer Pressure - High Range	#	1500-2500 psia	1
17. Pressurizer Level	#	0-100%	1
18. Steam Generator Pressure	#	0-1050 psia	1/steam generator
19. Steam Generator Level	#	0-100%	1/steam generator

* Panel L042
#Panel L411

(a) 0-600°F until completion of DCP 6604
(b) 190-625°F until completion of DCP 6604

SAN ONOFE-UNIT 3

3/4 3-49

AMENDMENT NO. 58

Revised

TABLE 4.3-6

REMOTE SHUTDOWN MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>
1. Log Power Level	M	R
2. Reactor Coolant Cold Leg Temperature	M	R
3. Pressurizer Pressure	M	R
4. Pressurizer Level	M	R
5. Steam Generator Level	M	R
6. Steam Generator Pressure	M	R
7. Source Range Neutron Flux	M	R
8. Condenser Vacuum	M	R
9. Volume Control Tank Level	M	R
10. Letdown Heat Exchanger Pressure	M	R
11. Letdown Heat Exchanger Temperature	M	R
12. Boric Acid Makeup Tank Level	M	R
13. Condensate Storage Tank Level	M	R
14. Reactor Coolant Hot Leg Temperature	M	R
15. Pressurizer Pressure - Low Range	M	R
16. Pressurizer Pressure - High Range	M	R
17. Pressurizer Level	M	R
18. Steam Generator Pressure	M	R
19. Steam Generator Level	M	R

INSTRUMENTATIONFIRE DETECTION INSTRUMENTATIONLIMITING CONDITION FOR OPERATION

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

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

ACTION:

With the number of OPERABLE fire detection instrument(s) for each fire area/zone less than the number listed in Table 3.3-11, perform the following as applicable:

- a.1 With less than or equal to 50% of the early warning detectors inoperable, restore the inoperable early warning fire detectors to operable status within 14 days or within the next 1 hour establish an hourly fire watch.*
- a.2 With greater than 50% of the early warning detectors inoperable or with any two or more adjacent early warning fire detectors inoperable, establish an hourly fire watch within 1 hour.*
- a.3 With less than the listed number of actuation detectors operable, establish an hourly fire watch within 1 hour.*
- a.4 For instruments located inside containment, inspect the containment at least once per 8 hours or monitor the containment air temperature at least once per hour at the locations listed in Specification 4.6.1.5.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

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

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

*Not required for areas that pose temporary radiation and/or life-threatening safety hazards. If the fire watch/patrol cannot be restored within 24 hours, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 7 days outlining the action taken, the cause of the hazard and the plans and schedule for restoring the required fire watch/patrol.

INSTRUMENTATION

FIRE DETECTION INSTRUMENTATION

SURVEILLANCE REQUIREMENTS (Continued)

4.3.3.7.3 The non-supervised circuits associated with detector alarms between the instruments and the control room shall be demonstrated OPERABLE at least once per 31 days.

4.3.3.7.4 Following a seismic event (basemat acceleration greater than or equal to 0.05 g):

- a. Within 2 hours each fire area/zone shown in Table 3.3-11 shall be inspected for fires, and
- b. Within 72 hours the OPERABILITY of the fire detection system in each fire area/zone shown in Table 3.3-11 shall be assessed by the following:
 1. Status of fire alarms,
 2. Status of trouble alarms,
 3. In-place visual inspection for external damage of detectors for each fire area/zone outside containment.

The results of this assessment shall be evaluated and action taken consistent with Specification 3.3.3.7.

TABLE 3.3-11
FIRE DETECTION INSTRUMENTS

Fire Area/Zone	Instrument Location	Early Warning	Actuation
3-CO-15-1A*	Reactor Coolant Pump 002		9
	Reactor Coolant Pump 004		8
3-CO-15-1B*	Reactor Coolant Pump 001		8
	Reactor Coolant Pump 003		8
3-CO-15-1C*	Containment Area		
	Quadrants 1, 2, 3 and 4		
	Elevation 30' -0"	4	
	Elevation 45' -0"	9	
3-CO-63-1D*	Charcoal Filter	1**	
	Elevation 45' -0"		
	Operating Floor	10	
3-PE-9-2A	Penetration Bldg	4	
	Elevation 9' 0"		
3-PE-(-18)-2B	Penetration Bldg	2	
	Piping Area		
3-PE-30-2C	Elevation (-) 18' -0"		
	Penetration Bldg	7	
	Piping Area		
3-PE-30-2D	Elevation 30' -0"		
	Charcoal Filter	1**	
3-PE-30-2D	Penetration Bldg	2	
	Piping Area		
3-PE-45-3A	Elevation 30' -0"		
	Penetration Bldg	7	
3-PE-63-3B	Electrical Penetration Area		
	Elevation 45' -0"		
3-PE-63-3B	Penetration Bldg	12	
	Electrical Penetration Area		
	Elevation 63' -0"		

TABLE 3.3-11 (Continued)
FIRE DETECTION INSTRUMENTS

Fire Area/Zone	Instrument Location	Early Warning	Actuation
3-AC-9-6	Auxiliary Control Bldg Cable Spreading Room Elevation 9' -0"	14	36
3-AC-9-7	Auxiliary Control Bldg Cable Riser Gallery Elevation 9' -0"	7	39
3-AC-30-20B	Auxiliary Control Bldg Computer Room 3 Elevation 30' -0"	6	
3-AC-30-21	Auxiliary Control Bldg Cable Riser Gallery Elevation 30' -0"	3	52
3-AC-50-30	Auxiliary Control Bldg HVAC Room 3B Elevation 50' -0"	1	
3-AC-50-31	Auxiliary Control Bldg HVAC Room 3A Elevation 50' -0"	1	
3-AC-50-32	Auxiliary Control Bldg Cable Riser Gallery Elevation 50' -0"	2	27
3-AC-50-33	Auxiliary Control Bldg Cable Riser Gallery Elevation 50' -0"	1	13
3-AC-50-34	Auxiliary Control Bldg Switchgear Room 3B Elevation 50' -0"	2	
3-AC-50-52	Auxiliary Control Bldg Battery Room 3B Elevation 50' -0"	1	
3-AC-50-53	Auxiliary Control Bldg Battery Room 3D Elevation 50' -0"	1	

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

Fire Area/Zone	Instrument Location	Early Warning	Actuation
3-AC-50-54	Auxiliary Control Bldg Battery Room 3C Elevation 50' -0"	1	
3-AC-50-55	Auxiliary Control Bldg Battery Room 3A Elevation 50' -0"	1	
3-AC-50-56	Auxiliary Control Bldg Distribution Room 3A Elevation 50' -0"	1	
3-AC-50-57	Auxiliary Control Bldg Distribution Room 3C Elevation 50' -0"	1	
3-AC-50-58	Auxiliary Control Bldg Distribution Room 3D Elevation 50' -0"	1	
3-AC-50-59	Auxiliary Control Bldg Distribution Room 3B Elevation 50' -0"	1	
3-AC-50-60	Auxiliary Control Bldg Switchgear Room 3A Elevation 50' -0"	2	
3-AC-50-62	Auxiliary Control Bldg Distribution Room Elevation 50' -0"	1	
3-AC-70-65	Auxiliary Control Bldg Cable Riser Gallery Elevation 70' -0"	3	24
3-AR-9-91	Auxiliary Radwaste Bldg Charging Pump Room Elevation 9' -0"	1	
3-AR-9-92	Auxiliary Radwaste Bldg Charging Pump Room Elevation 9' -0"	1	
3-AR-9-93	Auxiliary Radwaste Bldg Charging Pump Room Elevation 9' -0"	1	

TABLE 3.3-11 (Continued)
FIRE DETECTION INSTRUMENTS

Fire Area/Zone	Instrument Location	Early Warning	Actuation
3-AR-63-118	Auxiliary Radwaste Bldg Cable Tray Gallery Elevation 63' -0"	2	4
3-FH-17-122	Fuel Handling Bldg Fuel Pool Pump Room Elevation 17' -0"	2	
3-FH-17-123	Fuel Handling Bldg Spent Fuel Pool/Oper Floor Elevation 17' -0"	7	
3-FH-45-130	Fuel Handling Bldg A/C Room No. 2 Elevation 45' -0"	1	
	Charcoal Filter	1**	
3-FH-45-132	Fuel Handling Bldg A/C Room No. 1 Elevation 45' -0"	1	
	Charcoal Filter	1**	
3-SE-(-5)-135B	Safety Equipment Bldg Train B CCW Pump Room Elevation -5' -0"	1	
3-SE-(5)-135C	Safety Equipment Bldg Spare CCW Pump Room Elevation -5' -0"	1	
3-SE-(-5)-135D	Safety Equipment Bldg Train A CCW Pump Room Elevation (-)5' -0"	1	
3-SE-(-15)-136	Safety Equipment Bldg A/C Room Elevation 8' -0"	3	
3-SE-(-15)-137A	Safety Equipment Bldg Safety Related Pump Room Elevation (-)15' -0"	1	
3-SE-(-15)-137B	Safety Equipment Bldg Safety Related Pump Room Elevation (-)15' -0"	1	
3-SE-(-15)-137C	Safety Equipment Bldg Safety Related Pump Room Elevation (-)15' -0"	1	

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

Fire Area/Zone	Instrument Location	Early Warning	Actuation
3-SE-8-140B	Safety Equipment Bldg Chemical Storage Room Elevation 8' -0"	1	
3-SE-30-142A	Safety Equipment Bldg Electrical Tunnel Elevation 30' -0"	17	
	Section 1		15
	Section 2		4
	Section 3		4
	Section 4		4
	Section 5		4
	Section 6		7
3-SE-30-145A	Safety Equipment Bldg Main Steam Relief Valves Elevation 30' -0"	2	
3-TB-7-148A	Turbine Bldg Elevation 7' -0" (3L197Z05)	5	
	Elevation 30' -0" (3L198Z01)	4	
	(3L198Z04)	4	
	Elevation 56' -0" (3L198Z08)	7	
	(3L198Z09)	8	
3-TB-9-148F	Intake Structure Unit 3 Saltwater Cooling Pump Room Elevation 9' -0"	4	
3-CT-(-2)-142B	Electrical Cable Tunnel Elevation (-)2' -0"	21	
	Section 7		39
	Section 8		9
	Section 9		16
	Section 10		10
3-CT-16-142C	Cable Tunnel Cable Shaft Elevation 16' -0"	1	21
3-DG-30-155	Diesel Generator Bldg Diesel Generator Room B Elevation 30' -0"	3	4

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

Fire Area/Zone	Instrument Location	Early Warning	Actuation
3-DG-30-158	Diesel Generator Bldg Diesel Generator Room A Elevation 30' -0"	3	4
3-TK-30-161A	Tank Building Auxiliary Feedwater Pump Room Elevation 30' -0"	2	6
	AFW Pumps P-504 & P-140		9
<u>COMMON AREAS.</u>			
2-AC-9-9	Auxiliary Control Bldg Emergency Chiller Room Elevation 9' -0"	2	
2-AC-9-11	Auxiliary Control Bldg Emergency Chiller Room Elevation 9' -0"	2	
2-AC-9-16	Auxiliary Control Bldg Corridor Elevation 9' -0"	4	
2-AC-9-17	Auxiliary Control Bldg Relay Room Elevation 9' -0"	3	
2-AC-30-20A	Auxiliary Control Bldg Control Room Elevation 30' -0"	27***	
	Control Room Panels	19	
2-AC-30-20E	Auxiliary Control Bldg Lobby Elevation 30' -0"	1	
2-AC-30-23	Auxiliary Control Bldg Fan Room Elevation 30' -0"	1	
	Air Conditioner Charcoal Filter	1**	
	Emergency Ventilation Charcoal Filter	1**	
2-AC-30-26	Auxiliary Control Bldg Fan Room Elevation 30' -0"	1	
	Air Conditioner Charcoal Filter	1**	
	Emergency Ventilation Charcoal Filter	1**	

TABLE 3.3-11 (Continued)
FIRE DETECTION INSTRUMENTS

Fire Area/Zone	Instrument Location	Early Warning	Actuation
2-AC-50-29	Auxiliary Control Bldg Lobby/Monitor Control Room Elevation 50' -0"	12	
2-AC-50-43	Auxiliary Control Bldg Evacuation Room Elevation 50'-0"	1	
2-AC-70-64****	Auxiliary Control Bldg Corridor 401 Elevation 70' -0"	4	
	Radiochem Counting Rm 420 Elevation 70' -0"	1	
	Above Suspended Ceiling Elevation 70' -0"	8	
2-AR-37-102A	Auxiliary Radwaste Bldg Corridor Elevation 37' -0"	9	
2-AR-24-102B	Auxiliary Radwaste Bldg Equipment Room Elevation 24' -0"	4	
2-AR-50-111A	Volume Control Tank Rooms	2	
2-AR-50-111B	Electrical Equipment and Receiving Area	4	
2-AR-63-116	Auxiliary Radwaste Bldg Corridor and Rooms Elevation 63' -6"	4	
2-TB-(-9)-148E	Intake Structure Saltwater Cooling Tunnel Elevation -9' -0"	6	

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

** For charcoal filters, the thermistor strip detection system is required to be operable.

*** On completion of DCP 2/3-6554.36TJ.

**** Area/Zone 2-AC-70-64 after Revision 4 of UFHA.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

4.7.8.1.3 The fire pump diesel 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 battery is above the plates, and
 - 2. The overall battery voltage is greater than or equal to 24 volts.
- b. At least once per 92 days by verifying that the specific gravity is appropriate for continued service of the battery.
- c. At least once per 18 months by verifying that:
 - 1. The batteries, cell plates and battery racks show no visual indication of physical damage or abnormal deterioration, and
 - 2. The battery-to-battery and terminal connections are clean, tight, free of corrosion, and coated with anti-corrosion material.

PLANT SYSTEMSSPRAY AND/OR SPRINKLER SYSTEMSLIMITING CONDITION FOR OPERATION

3.7.8.2 The spray and/or sprinkler systems listed in Table 3.7-5 shall be OPERABLE.

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

ACTION:

- a. With one or more of the above required spray and/or sprinkler systems inoperable, within 1 hour establish a continuous fire watch* with back-up fire suppression equipment** for those areas outside containment in which redundant systems or components could be damaged; for other areas outside containment, establish an hourly fire watch patrol.*
- b. With one or more of the above required spray and/or sprinkler systems inside containment inoperable, restore the system to OPERABLE status within 24 hours or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 7 days outlining the action taken, the cause of the inoperability, and the plans and schedule for restoring the system to OPERABLE status
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

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

- a. At least once per 31 days by verifying that each valve (manual, power-operated or automatic) outside of containment in the flow path is in its correct position.

*Not required for areas that pose temporary radiation and/or life-threatening safety hazards. If the fire watch/patrol cannot be restored within 24 hours, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 7 days outlining the action taken, the cause of the hazard and the plans and schedule for restoring the required fire watch/patrol.

**Fire hose will be run within 1 hour of entering the ACTION statement if an operable water supply is not available within 250 feet of the area protected by the inoperable spray and/or sprinkler system or 2-150 ft. hose packs (1-3/4") on the fire truck are not operable. Fire hose will be supplied by the fire brigade responding to a fire if an operable water supply is available within 250 feet of the area protected by the inoperable spray and/or sprinkler system.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b. At least once per 31 days during each COLD SHUTDOWN or REFUELING by verifying that each valve (manual, power-operated or automatic) inside containment in the flow path is in its correct position.
- c. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.
- d. 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.
 - 2. By a visual inspection of the dry pipe spray and wet pipe spray sprinkler headers to verify their integrity, and
 - 3. By a visual inspection of each spray/sprinkler head to verify the spray pattern is not obstructed.
- e. At least once per 3 years by performing an air flow test through each open head spray/sprinkler header and verifying each open head spray/sprinkler nozzle is unobstructed.

*At least once per refueling outage for those plant areas that are inaccessible during non-refueling plant operation.

TABLE 3.7-5
SAFETY-RELATED SPRAY AND/OR SPRINKLER SYSTEMS

Fire Area/Zone	Location of Protection	System Identifier	Type
3-CO-15-1A	Reactor Coolant Pump 002	SA2301MU506	Deluge-Water Spray
	Reactor Coolant Pump 004	SA2301MU507	Deluge-Water Spray
3-CO-15-1B	Reactor Coolant Pump 001	SA2301MU504	Deluge-Water Spray
	Reactor Coolant Pump 003	SA2301MU505	Deluge-Water Spray
3-CO-15-1C	Charcoal Filters In Recirc Filtration Unit Elevation 45' -0"	SA2301MU348	Manually Activated Deluge-Water Spray
3-PE-30-2C	Charcoal Filters Elevation 30' -0"	SA2301MU349	Manually Activated Deluge-Water Spray
3-AC-9-6	Cable Spreading Room Elevation 9' -0"	SA2301MU464 SA2301MU465	Deluge-Water Spray
3-AC-9-7	Cable Riser Gallery Elevation 9' -0"	SA2301MU459	Deluge-Water Spray
3-AC-30-21	Cable Riser Gallery Elevation 30' -0"	SA2301MU458	Deluge-Water Spray
3-AC-50-30	HVAC Room 3B Elevation 50' -0"	SA2301MU455	Wet Pipe
3-AC-50-31	HVAC Room 3A Elevation 50' -0"	SA2301MU455	Wet Pipe
3-AC-50-32	Cable Riser Gallery East Portion Elevation 50' -0"	SA2301MU457	Deluge-Water Spray
3-AC-50-33	Cable Riser Gallery West Portion Elevation 50' -0"	SA2301MU457	Deluge-Water Spray
3-AC-70-65	Cable Riser Gallery Elevation 70' -0"	SA2301MU456	Deluge-Water Spray
3-AR-63-118	Cable Riser Gallery Elevation 63' -0"	SA2301MU467	Deluge-Water Spray

TABLE 3.7-5 (Continued)

SAFETY-RELATED SPRAY AND/OR SPRINKLER SYSTEMS

Fire Area/Zone	Location of Protection	System Identifier	Type
3-SE-(-5)-135A	Piping/Heat Exchanger Room Elevation 8' -0"	SA2301MU480	Wet Pipe
3-SE-(-15)-136	A/C Room Elevation 8' -0"	SA2301MU480	Wet Pipe
3-SE-30-142A	Electrical Tunnel Elevation 30' -0"		Deluge-Water Spray
	Section 1	SA2301MU477	
	Section 2	SA2301MU478	
	Section 3	SA2301MU479	
	Section 4	SA2301MU481	
	Section 5	SA2301MU482	
	Section 6	SA2301MU483	
3-FH-45-130	Charcoal Filters Emergency AC Unit E-370 Elevation 45' -0"	SA2301MU351	Manually Activated Deluge-Water Spray
3-FH-45-132	Charcoal Filter Emergency AC Unit E-371 Elevation 45' -0"	SA2301MU352	Manually Activated Deluge-Water Spray
3-TB-9-148F	Unit 3 Saltwater Cooling Pump Room	SA2301MU495	Wet Pipe
3-CT-(-2)-142B	Electrical Cable Tunnel		Deluge-Water Spray
	Section 7	SA2301MU484	
	Section 8	SA2301MU500	
	Section 9	SA2301MU501	
	Section 10	SA2301MU485	

TABLE 3.7-5 (Continued)
SAFETY-RELATED SPRAY AND/OR SPRINKLER SYSTEMS

Fire Area/Zone	Location of Protection	System Identifier	Type
3-CT-16-142C	Cable Shaft	SA2301MU503	Deluge-Water Spray
3-DG-30-155	Diesel Generator Rm B Elevation 30' -0"	SA2301MU496	Pre-Action Sprinkler
3-DG-30-158	Diesel Generator Rm A Elevation 30' -0"	SA2301MU497	Pre-Action Sprinkler
3-TK-30-161A	Auxiliary Feedwater Pump Room Elevation 30' -0"	S32301MU498	Pre-Action Sprinkler
		S32301MU499	Deluge-Water Spray
<u>COMMON</u>			
2-AC-9-16	Corridor Elevation 9' -0"	SA2301MU461	Wet Pipe
2-AC-30-23	Emergency AC Unit E-418	SA2301MU346	Manually Activated Deluge-Water Spray
	Charcoal Filter A-207	SA2301MU347	Manually Activated Deluge-Water Spray
2-AC-30-26	Emergency AC Unit E-419	SA2301MU235	Manually Activated Deluge-Water Spray
	Fan Room Elevation 30' -0"	SA2301MU450	Wet Pipe
	Charcoal Filter A-206	SA2301MU234	Manually Activated Deluge-Water Spray
2-AC-30-27	Corridor Elevation 30' -0"	SA2301MU450	Wet Pipe
2-AC-50-29	Lobby/Monitor Control Room	SA2301MU455	Wet Pipe
2-AC-70-64*	Corridor Elevation 70' -0"	SA2301MU454	Wet Pipe
2-TB-(-9)-148E	Saltwater Cooling Tunnel	SA2301MU583	Wet Pipe
		SA2301MU495	
3-TB-9-148F	Unit 3 Saltwater Cooling Pump Room	SA2301MU495	Wet Pipe

*Area/Zone 2-AC-70-64 after Revision 4 of UFHA.

PLANT SYSTEMSFIRE HOSE STATIONSLIMITING CONDITION FOR OPERATION

3.7.8.3 The fire hose stations shown in Table 3.7-6 shall be OPERABLE.

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

ACTION:

- a.1. With one or more of the fire hose stations shown in Table 3.7-6 inoperable, route a fire hose* to provide equivalent nozzle flow capacity to the unprotected area(s) from an OPERABLE hose station or alternate fire water supply, within 1 hour if the inoperable fire hose is the primary means of fire suppression; otherwise provide the additional hose within 24 hours. Where it can be demonstrated that the physical routing of the fire hose would result in a recognizable hazard to operating technicians, plant equipment, or the hose itself, a fire hose shall be stored in an area easily accessible to the unprotected area. Signs identifying the purpose and location of the fire hose shall be mounted above the hose and at the inoperable hose station.
- a.2. With one or more of the above required hose stations inside containment inoperable and the equipment hatch closed, restore the hose station(s) to OPERABLE status within 24 hours or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 7 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 Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.8.3 Each of the fire hose stations shown in Table 3.7-6 shall be demonstrated OPERABLE:

- a. At least once per 31 days by visual inspection of the stations accessible during plant operation to assure all required equipment is at the station.

*Fire hose will be run within 1 hour of entering the ACTION statement when an operable water supply is not available within 250 feet of the inoperable hose station(s) or 2-150 ft. hose packs (1-3/4") on the fire truck are not operable. Fire hose will be supplied by the fire brigade responding to a fire if an operable water supply is available within 250 feet of the inoperable hose station(s).

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b. At least once per 18 months* by:
 - 1. Visual inspection of the stations not accessible during plant operations to assure all required equipment is at the station.
 - 2. Removing the hose for inspection and re-racking, and
 - 3. Inspecting all gaskets and replacing any degraded gaskets in the couplings.
- c. At least once per 3 years by:
 - 1. Partially opening each hose station valve to verify valve OPERABILITY and no flow blockage.
 - 2. Conducting a hose hydrostatic test at a pressure of 150 psig or at least 50 psig above the maximum fire main operating pressure, whichever is greater.

*At least once per refueling outage for those plant areas that are inaccessible during non-refueling plant operation.

TABLE 3.7-6
FIRE HOSE STATIONS

LOCATION	FIRE AREA/ZONE	ELEVATION	STATION NO.
Unit 3 Containment	3-CO-63-110	63'6"	67, 74, 131
Unit 3 Containment	3-CO-15-1C	45'0"	68, 70, 73
Unit 3 Containment	3-CO-15-1C	30'0"	64, 66, 72
Unit 3 Containment	3-CO-15-1C	17'6"	65, 69, 71
Unit 3 Electrical Penetration Area	3-PE-63-3B	63'6"	126, 127
Unit 3 Electrical Penetration Area	3-PE-45-3A	45'0"	124, 125
Unit 3 Cable Spreading Room (South) Auxiliary Control	3-AC-9-6	9'0"	113
Unit 3 Cable Riser Gallery (South) Auxiliary Control	3-AC-9-7	9'0"	114
Unit 3 Cable Riser Gallery (South) Auxiliary Control	3-AC-30-21	30'0"	115
Unit 3 Cable Riser Gallery (South) Auxiliary Control	3-AC-50-32	50'0"	116
Unit 3 Cable Riser Gallery (North) Auxiliary Control	3-AC-70-65	70'0"	117
Unit 3 Piping Room Safety Equipment	3-SE-(-5)-135A	(-)5'6"	92
Unit 3 Piping Room Safety Equipment	3-SE-(-5)-135A	8'0"	91
Unit 3 Corridor Safety Equipment	3-SE-(-15)-136	-15'0"	93

TABLE 3.7-6
FIRE HOSE STATIONS (Continued)

LOCATION	FIRE AREA/ZONE	ELEVATION	STATION NO.
Unit 3 A/C Room Safety Equipment	3-SE-(-15)-136	8'0"	94
Unit 3 Operating Floor Fuel Handling	3-FH-17-123	63'6"	128, 129
Unit 3 Turbine Building	3-TB-7-148A	7'0"	83, 78, 87, 79
Unit 3 Turbine Building	3-TB-7-148A	30'0"	75, 84, 80, 88
Unit 3 Turbine Building	3-TB-7-148A	56'0"	76, 85, 89, 81
Unit 3 Turbine Building	3-TB-7-148A	72'0"	77, 82, 90, 86
Unit 3 Intake Structure	3-TB-9-148C	9'0"	96
Unit 3 Diesel Generator	3-DG-30-158	30'0"	99
Unit 3 Diesel Generator	3-DG-30-155	30'0"	100
<u>COMMON</u>			
Corridor Auxiliary Radwaste	2-AR-9-76	9'0"	32, 36, 40, 44
Corridor Auxiliary Radwaste	2-AR-24-94	24'0"	33, 37, 45
Corridor Auxiliary Radwaste	2-AR-37-102A	37'0"	34, 38, 41, 46
Corridor Auxiliary Radwaste	2-AR-50-111A	50'0"	102, 104, 106
Corridor Auxiliary Radwaste	2-AR-63-116	63'6"	103, 105, 107
Corridor Auxiliary Control	2-AC-9-16	9'0"	48, 52, 60
Corridor Auxiliary Control	2-AC-30-27	30'0"	49
Corridor Auxiliary Control	2-AC-30-22	30'0"	61

TABLE 3.7-6
FIRE HOSE STATIONS (Continued)

LOCATION	FIRE AREA/ZONE	ELEVATION	STATION NO.
Lobby Auxiliary Control	2-AC-30-20E	30'0"	53
Hall-Mezzanine Auxiliary Control	2-AC-39-20D	39'2"	101
Lobby Auxiliary Control	2-AC-50-29	50'0"	50
Lobby - Motor Control Room Auxiliary Control	2-AC-50-29	50'0"	57
Lobby - Motor Control Room Auxiliary Control	2-AC-50-29	50'0"	56
Lobby Auxiliary Control	2-AC-50-29	50'0"	54, 62
Corridor Auxiliary	2-AC-70-64*	70'0"	51, 55, 58, 59
Office Area Auxiliary Control	2-AC-70-64*	70'0"	63
Roof (To Electrical Switchgear Room) Auxiliary Control	2-AC-85-70	85'0"	43

*Area/Zone 2-AC-70-64 after Revision 4 of UFHA.

PLANT SYSTEMS

3/4.7.9 FIRE RATED ASSEMBLIES

LIMITING CONDITION FOR OPERATION

3.7.9 All fire rated assemblies* separating redundant equipment or cable which could affect the ability to achieve and maintain safe shutdown in the event of a fire, or defining areas of the plant which have specific BTP 9.5-1, Appendix A, Section F requirements, and all penetration sealing devices** in the above barriers shall be OPERABLE.

APPLICABILITY: At all times when the equipment protected by the fire barrier is required to be OPERABLE.

ACTION:

- a. With one or more of the above required fire rated assemblies inoperable, establish a roving fire watch patrol for areas with detection and/or area/zone wide suppression equipment operable on one side within one hour.*** For area(s) with no detection or suppression equipment operable on one side, establish a continuous fire watch.***
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

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

- a. Verifying at least once per 24 hours the position of each closed fire door and that doors with automatic hold-open and release mechanisms are free of obstructions.
- b. Verifying at least once per 7 days the position of each locked closed fire door.

*Rated walls, non-rated (heavy concrete) walls, floor/ceilings, raceway enclosures and other fire barriers.

**Fire doors, fire windows, fire dampers, seismic gap seals, cable, ventilation duct and piping penetration seals.

***Not required for areas that pose temporary radiation and/or life-threatening safety hazards. If the fire watch/patrol cannot be restored within 24 hours, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 7 days outlining the action taken, the cause of the hazard and the plans and schedule for restoring the required fire watch/patrol.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS

- c. Performing a CHANNEL FUNCTIONAL TEST at least once per 31 days of the fire door supervision system.
- d. Inspecting at least once per 6 months the automatic hold-open, release, and closing mechanism and latches.
- e. Performing a functional test at least once per 18 months of the automatic hold-open, release, closing mechanisms and latches.

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

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

*At least once per refueling outage for those plant areas that are inaccessible during non-refueling plant operation.

INSTRUMENTATION

BASES

room. This capability is required in the event control room habitability is lost and is consistent with General Design Criteria 19 of 10 CFR 50.

The OPERABILITY of the remote shutdown instrumentation in Panel L411 ensures that sufficient capability is available to permit shutdown and maintenance of COLD SHUTDOWN of the facility in the event of a fire in the cable spreading room, control room or remote shutdown panel, L042.

3/4.3.3.6 ACCIDENT MONITORING INSTRUMENTATION

The OPERABILITY of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables following an accident. This capability is consistent with the recommendations of Regulatory Guide 1.97, "Instrumentation for Light-Water-Cooled Nuclear 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".

The containment high range area monitors (RU-148 & RU-149) and the main steamline radiation monitors (RU-139 A&B and RU-140 A&B) are in Table 3.3-6. The high range effluent monitors and samplers (RU-142, RU-144 and RU-146) are in Table 3.3-13. The containment hydrogen monitors are in Specification 3/4.6.5.1. The Post Accident Sampling System (RCS coolant) is in Table 3.3-6.)

The Subcooled Margin Monitor (SMM), the Heated Junction Thermocouple (HJTC), and the Core Exit Thermocouples (CET) comprise the Inadequate Core Cooling (ICC) instrumentation required by Item II.F.2 NUREG-0737, the Post TMI-2 Action Plan. The function of the ICC instrumentation is to enhance the ability of the plant operator to diagnose the approach to existence of, and recovery from ICC. Additionally, they aid in tracking reactor coolant inventory. These instruments are included in the Technical Specifications at the request of NRC Generic Letter 83-37. These are not required by the accident analysis, nor to bring the plant to Cold Shutdown.

In the event more than four sensors in a Reactor Vessel Level channel are inoperable, repairs may only be possible during the next refueling outage. This is because the sensors are accessible only after the missile shield and reactor vessel head are removed. It is not feasible to repair a channel except during a refueling outage when the missile shield and reactor vessel head are removed to refuel the core. If only one channel is inoperable, it should be restored to OPERABLE status in a refueling outage as soon as reasonably possible. If both channels are inoperable, both channels shall be restored to OPERABLE status in the nearest refueling outage. In the event that both HJTC channels are inoperable, existing plant instruments and operator training will be used as an alternate method of monitoring the reactor vessel inventory.

INSTRUMENTATIONBASES3/4.3.3.7 FIRE DETECTION INSTRUMENTATION

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

In the event that less than 50% of the fire detection instrumentation is inoperable in any fire area/zone, the establishment of frequent fire patrols in the affected areas is required to provide detection capability until the inoperable instrumentation is restored to OPERABLE.

Since the fire detectors are non-seismic, a plant visual inspection for fires is required within two hours following an earthquake ($\geq 0.05g$). Since safe shutdown systems are protected by seismic Category I barriers, any fire after an earthquake should be detected by this inspection before safe shutdown systems would be affected. Additionally, to verify the continued OPERABILITY of fire detection systems after an earthquake, an engineering evaluation of the fire detection instrumentation in the required zones is required to be performed within 72 hours following an earthquake.

3/4.3.3.8 RADIOACTIVE LIQUID EFFLUENT INSTRUMENTATION

The radioactive liquid effluent instrumentation is provided to monitor and control, as applicable, the releases of radioactive materials in liquid effluents during actual or potential releases of liquid effluents. The alarm/trip setpoints for these instruments shall be calculated in accordance with the procedures in the ODCM to ensure that the alarm/trip will occur prior to exceeding the limits of 10 CFR Part 20. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60, 63 and 64 of Appendix A to 10 CFR Part 50.

3/4.3.3.9 RADIOACTIVE GASEOUS EFFLUENT INSTRUMENTATION

The radioactive gaseous effluent instrumentation is provided to monitor and control, as applicable, the releases of radioactive materials in gaseous effluents during actual or potential releases of gaseous effluents. The alarm/trip setpoints for these instruments shall be calculated in accordance with the procedures in the ODCM to ensure that the alarm/trip will occur prior to exceeding the limits of 10 CFR Part 20. This instrumentation also includes provisions for monitoring and controlling the concentrations of potentially explosive gas mixtures in the waste gas holdup system. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60, 63 and 64 of Appendix A to 10 CFR Part 50.