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3.7.3 Fire Protection

3.7.3.8 Fire Detection Instrumentation

TRO 3.7.3.8 The fire detection instrumentation for each fire detection zone shown in Table 3.7.3.8-1 shall be OPERABLE.

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

ACTIONS

NOTE

1. Separate condition entry is allowed for each instrument.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. The number of OPERABLE fire detection instruments less than the Minimum Instruments Operable requirement of Table 3.7.3.8-1	A.1 Establish an hourly fire watch patrol	1 hour
	AND	
	A.2.1 Inspect the accessible zone(s) with inoperable instrument(s)	Once per hour
	OR	
	A.2.2 Inspect the affected area surrounding any inaccessible zones	Once per hour

TECHNICAL REQUIREMENT SURVEILLANCE

SURVEILLANCE		FREQUENCY
----------NOTE---------- When a detector is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and required Actions may be delayed for up to 15 minutes. ----------		N/A
TRS 3.7.3.8.1	Perform CHANNEL FUNCTIONAL TEST on accessible fire detection instruments.	12 months
TRS 3.7.3.8.2	Verify that the supervised circuits supervision associated with the detector alarms of each of the fire detection instruments listed in Table 3.7.3.8-1 are OPERABLE.	12 months
TRS 3.7.3.8.3	Perform CHANNEL FUNCTIONAL TEST on inaccessible fire detection instruments.	Prior to startup from each COLD SHUTDOWN exceeding 48 hours unless performed in the previous 12 months

TABLE 3.7.3.8-1
FIRE DETECTION INSTRUMENTATION

INSTRUMENT LOCATION			INSTRUMENT OPERABLE					
FIRE ZONE	ROOM OR AREA	ELEV.	HEAT		IONIZATION		PHOTO ELECTRIC	
			TOTAL	MIN.	TOTAL	MIN.	TOTAL	MIN.
a.	*Control Building*							
0-21A	Common Equipment Room Elevator Lobby	656'-0"	NA	NA	1	1	NA	NA
0-22A	Above Ceiling/Filter Area	687'-8"	NA	NA	10	5	NA	NA
0-22A	Elevator Lobby	676'-0"	NA	NA	1	1	NA	NA
0-22A	Chem Lab 0F135 High Temp. Alarm	687'-10"	2	1	NA	NA	NA	NA
	Chem Lab DS-021	687'-10"	2	1	NA	NA	NA	NA
	Chem Lab 0F138 High Temp. Alarm	687'-10"	2	1	NA	NA	NA	NA
	Chem Lab DS-022	687'-10"	2	1	NA	NA	NA	NA
	Chem Lab 0F141 High Temp. Alarm	687'-10"	2	1	NA	NA	NA	NA
	Chem Lab DS-023	687'-10"	2	1	NA	NA	NA	NA
	Chem Lab 0F144 High Temp. Alarm	687'-10"	2	1	NA	NA	NA	NA
	Chem Lab DS-024	687'-10"	2	1	NA	NA	NA	NA
0-23	Egress Corridor to South Stairwell	686'-6"	NA	NA	1	1	NA	NA
0-24A	UPS Panel Room U-2	698'-0"	4	2	2	1	NA	NA
0-24B	Corridor	698'-0"	NA	NA	5	3	NA	NA
0-24B	Corridor (Under Floor)	697'-0"	2	1	NA	NA	NA	NA
0-24B	Corridor (Above Ceiling)	698'-0"	4	2	NA	NA	NA	NA
0-24B	Corridor Elevator Lobby	698'-0"	NA	NA	1	1	NA	NA
0-24D	U1 Lower Relay Room	698'-0"	4	2	4	2	NA	NA
0-24E	Computer Room	698'-0"	NA	NA	6	3	NA	NA
0-24E	Computer Room (Above Ceiling)	698'-0"	12	6	4	2	NA	NA
0-24E	Computer Room 1U720	697'-0"	NA	NA	4	2	NA	NA
	PGCC Underfloor 1U722	697'-0"	NA	NA	4	2	NA	NA
	1U724	697'-0"	NA	NA	4	2	NA	NA
	1U726	697'-0"	NA	NA	4	2	NA	NA
	2U721	697'-0"	NA	NA	4	2	NA	NA
	2U723	697'-0"	NA	NA	4	2	NA	NA
	2U725	697'-0"	NA	NA	4	2	NA	NA
	2U727	697'-0"	NA	NA	4	2	NA	NA
0-24F	Computer Maintenance Rm and Office	698'-0"	NA	NA	6	3	NA	NA
0-24F	Comp Maint Rm & Office (Below Floor)	697'-0"	2	1	NA	NA	NA	NA
0-24F	Comp Maint Rm & Office (Above Ceiling)	698'-0"	2	1	NA	NA	NA	NA
0-24G	U2 Lower Relay Room	698'-0"	4	2	4	2	NA	NA
0-24G	U-2 Lower Relay Room 2U704	697'-0"	11	6	6	3	NA	NA
	PGCC Halon Panel 2U705	697'-0"	11	6	6	3	NA	NA
	Division II 2U706	697'-0"	11	6	6	3	NA	NA
	2U731	697'-0"	10	5	6	3	NA	NA
	2U732	697'-0"	11	6	6	3	NA	NA

TABLE 3.7.3.8-1
FIRE DETECTION INSTRUMENTATION

INSTRUMENT LOCATION			INSTRUMENT OPERABLE					
FIRE ZONE	ROOM OR AREA	ELEV.	HEAT		IONIZATION		PHOTO ELECTRIC	
			TOTAL	MIN.	TOTAL	MIN.	TOTAL	MIN.
0-24J	South Cable Chase	698'-0"	1	1	NA	NA	NA	NA
0-24L	Center Cable Chase	698'-0"	1	1	NA	NA	NA	NA
0-24M	North Cable Chase	698'-0"	1	1	NA	NA	NA	NA
0-25A	U-2 Lower Cable Spreading Room	714'-0"	20	10	6	3	NA	NA
0-25B	South Cable Chase	714'-0"	1	1	NA	NA	NA	NA
0-25C	Center Cable Chase	714'-0"	1	1	NA	NA	NA	NA
0-25D	North Cable Chase	714'-0"	1	1	NA	NA	NA	NA
0-25E	U-1 Lower Cable Spreading Room	714'-0"	26	13	5	3	NA	NA
0-25E	U-1 Lower Cable Spreading Room Elevator Lobby	714'-0"	NA	NA	1	1	NA	NA
0-26A	Copy Room	729'-1"	NA	NA	1	1	NA	NA
0-26B	South Cable Chase	729'-1"	NA	NA	1	1	NA	NA
0-26C	Center Cable Chase	729'-1"	NA	NA	1	1	NA	NA
0-26D	North Cable Chase	729'-1"	NA	NA	1	1	NA	NA
0-26E	Locker Room	729'-1"	NA	NA	1	1	NA	NA
0-26F	Vestibule Elevator Lobby	729'-1"	NA	NA	1	1	NA	NA
0-26F	Vestibule (Under Floor)	728'-1"	NA	NA	1	1	NA	NA
0-26G	Shift Office	729'-1"	NA	NA	1	1	NA	NA
0-26G	Shift Office (Under Floor)	728'-1"	NA	NA	2	1	NA	NA
0-26H	Control Room (Under Floor Unit 1)	728'-1"	NA	NA	15	8	NA	NA
0-26H	Control Room (Under Floor Unit 2)	728'-1"	NA	NA	12	6	NA	NA
0-26H	Control Room	729'-1"	NA	NA	10	5	NA	NA
0-26H	Control Room (Above Ceiling)	729'-1"	NA	NA	9	5	NA	NA
0-26I	Operational Support Center	729'-1"	NA	NA	1	1	NA	NA
0-26I	Operational Support Center (Under Floor)	728'-1"	NA	NA	2	1	NA	NA
0-26J	Vestibule	729'-1"	NA	NA	1	1	NA	NA
0-26J	Vestibule (Under Floor)	728'-1"	NA	NA	1	1	NA	NA
0-26K	Technical Support Center	741'-1"	NA	NA	10	5	NA	NA
0-26K	Technical Support Center Elevator Lobby	741'-1"	NA	NA	1	1	NA	NA
0-26K	Technical Support Center (Above Ceiling)	741'-1"	NA	NA	5	3	NA	NA
0-26L	Conference Room	741'-1"	NA	NA	6	3	NA	NA
0-26L	Conference Room (Above Ceiling)	741'-1"	NA	NA	2	1	NA	NA
0-26M	U-1 TSC Soffit	729'-1"	NA	NA	2	1	NA	NA
0-26M	U-1 TSC Soffit	741'-1"	NA	NA	2	1	NA	NA
0-26N	U-1 Control Room Soffit	741'-1"	NA	NA	2	1	NA	NA
0-26P	U-2 Control Room Soffit	741'-1"	NA	NA	2	1	NA	NA
0-26R	U-2 TSC Soffit	729'-1"	NA	NA	2	1	NA	NA
0-26R	U-2 TSC Soffit	741'-1"	NA	NA	2	1	NA	NA

TABLE 3.7.3.8-1
FIRE DETECTION INSTRUMENTATION

INSTRUMENT LOCATION				INSTRUMENT OPERABLE					
FIRE ZONE	ROOM OR AREA		ELEV.	HEAT		IONIZATION		PHOTO ELECTRIC	
				TOTAL	MIN.	TOTAL	MIN.	TOTAL	MIN.
0-26S	South Cable Chase		741'-1"	1	1	NA	NA	NA	NA
0-26T	Center Cable Chase		741'-1"	1	1	NA	NA	NA	NA
0-26V	North Cable Chase		741'-1"	1	1	NA	NA	NA	NA
0-27A	U-2 Upper Relay Room		754'-0"	4	2	3	2	NA	NA
0-27A	U-2 Upper Relay Room	2U700	753'-0"	11	6	6	3	NA	NA
	PGCC Halon Panel	2U701	753'-0"	11	6	6	3	NA	NA
	Division I	2U702	753'-0"	11	6	6	3	NA	NA
		2U703	753'-0"	11	6	6	3	NA	NA
		2U730	753'-0"	11	6	6	3	NA	NA
0-27B	U-2 Upper Cable Spreading Room		753'-0"	24	12	5	3	NA	NA
0-27B	U-2 Upper Cable Spreading Room (Under Floor)		753'-0"	4	2	NA	NA	NA	NA
0-27C	U-1 Upper Cable Spreading Room		753'-0"	27	14	8	4	NA	NA
0-27C	U-1 Upper Cable Spreading Room (Under Floor)		753'-0"	4	2	NA	NA	NA	NA
0-27C	U-1 Upper Cable Spreading Room Elevator Lobby		754'-0"	NA	NA	1	1	NA	NA
0-27D	Electrician's Office		754'-0"	2	1	1	1	NA	NA
0-27E	U-1 Upper Relay Room		754'-0"	4	2	2	1	NA	NA
0-27F	South Cable Chase		754'-0"	1	1	NA	NA	NA	NA
0-27G	Center Cable Chase		754'-0"	1	1	NA	NA	NA	NA
0-27H	North Cable Chase		754'-0"	1	1	NA	NA	NA	NA
0-28A-I	Equipment Room		771'-0"	NA	NA	1	1	NA	NA
0-28A-II	Equipment Room		771'-0"	NA	NA	3	2	NA	NA
0-28B-I	Equipment Room		771'-0"	NA	NA	1	1	NA	NA
0-28B-II	Equipment Room		771'-0"	NA	NA	2	1	NA	NA
0-28B-II	Equipment Room Elevator Lobby		771'-0"	NA	NA	1	1	NA	NA
0-28C	Battery Room		771'-0"	NA	NA	1	1	NA	NA
0-28D	Battery Room		771'-0"	NA	NA	1	1	NA	NA
0-28E	Battery Room		771'-0"	NA	NA	1	1	NA	NA
0-28F	Battery Room		771'-0"	NA	NA	1	1	NA	NA
0-28G	Battery Room		771'-0"	NA	NA	1	1	NA	NA
0-28H	Repair Shop		771'-0"	NA	NA	2	1	NA	NA
0-28I	Battery Room		771'-0"	NA	NA	1	1	NA	NA
0-28J	Battery Room		771'-0"	NA	NA	1	1	NA	NA
0-28K	Battery Room		771'-0"	NA	NA	1	1	NA	NA
0-28L	Battery Room		771'-0"	NA	NA	1	1	NA	NA
0-28M	Battery Room		771'-0"	NA	NA	1	1	NA	NA

TABLE 3.7.3.8-1
FIRE DETECTION INSTRUMENTATION

INSTRUMENT LOCATION			INSTRUMENT OPERABLE					
FIRE ZONE	ROOM OR AREA	ELEV.	HEAT		IONIZATION		PHOTO ELECTRIC	
			TOTAL	MIN.	TOTAL	MIN.	TOTAL	MIN.
0-28N	Battery Room	771'-0"	NA	NA	1	1	NA	NA
0-28P	South Cable Chase	771'-0"	1	1	NA	NA	NA	NA
0-28Q	Center Cable Chase	771'-0"	1	1	NA	NA	NA	NA
0-28R	North Cable Chase	771'-0"	1	1	NA	NA	NA	NA
0-28T	Battery Room	771'-0"	NA	NA	1	1	NA	NA
0-29A	Elevator Vestibule	783'-0"	NA	NA	1	1	NA	NA
0-29B	H&V Equipment Room	783'-0"	NA	NA	10	5	NA	NA
0-30A	HVAC Equipment Room	806'-0"	NA	NA	19	10	NA	NA
0-30A	Freight Elevator Lobby	806'-0"	NA	NA	1	1	NA	NA
0-30A	CREOASS 0F125A High Temp. Alarm	806'-0"	7	4	NA	NA	NA	NA
0-30A	CREOASS DS-091	806'-0"	7	4	NA	NA	NA	NA
0-30A	CREOASS 0F125B High Temp. Alarm	806'-0"	7	4	NA	NA	NA	NA
0-30A	CREOASS DS-092	806'-0"	7	4	NA	NA	NA	NA
0-30A	SGTS - 0F169A High Temp. Alarm	806'-0"	1	1	NA	NA	NA	NA
0-30A	SGTS - DS-093	806'-0"	1	1	NA	NA	NA	NA
0-30A	SGTS - 0F169B High Temp. Alarm	806'-0"	1	1	NA	NA	NA	NA
0-30A	SGTS - DS-094	806'-0"	1	1	NA	NA	NA	NA
b.	*Reactor Building*							
2-1A	Core Spray Pump Room	645'-0"	NA	NA	8	4	NA	NA
2-1B	Core Spray Pump Room	645'-0"	NA	NA	6	3	NA	NA
2-1B	Elevator Lobby	645'-0"	NA	NA	1	1	NA	NA
2-1C	HPCI Pump Room	645'-0"	2	1	NA	NA	7	4
2-1D	RCIC Pump Room	645'-0"	2	1	NA	NA	5	3
2-1E	RHR Pump Room	645'-0"	NA	NA	NA	NA	13	7
2-1F	RHR Pump Room	645'-0"	NA	NA	NA	NA	15	8
2-1G	Sump Room	645'-0"	NA	NA	2	1	NA	NA
2-1I	Stairwell 202	645'-818'	NA	NA	2	1	NA	NA
2-2A	Access Area and Remote Shutdown Panel Room	670'-0"	NA	NA	5	3	NA	NA
2-2A	Elevator Lobby	670'-0"	NA	NA	1	1	NA	NA
2-2B	Core Spray Pump Room	670'-0"	NA	NA	11	6	NA	NA
2-3A	Access Area	683'-0"	NA	NA	4	2	NA	NA
2-3A	Access Area Elevator Lobby	683'-0"	NA	NA	1	1	NA	NA
2-3B-N	Equipment Removal Area - North	683'-0"	NA	NA	13	7	NA	NA
2-3B-S	Equipment Removal Area - South	683'-0"	NA	NA	1	1	NA	NA
2-3B-W	Equipment Removal Area - Wraparound	683'-0"	NA	NA	2	1	NA	NA
2-3C-N	Equipment Access Area - North	683'-0"	NA	NA	NA	NA	4	2

TABLE 3.7.3.8-1
FIRE DETECTION INSTRUMENTATION

INSTRUMENT LOCATION			INSTRUMENT OPERABLE					
			HEAT		IONIZATION		PHOTO ELECTRIC	
FIRE ZONE	ROOM OR AREA	ELEV.	TOTAL	MIN.	TOTAL	MIN.	TOTAL	MIN.
2-3C-S	Equipment Access Area - South	683'-0"	NA	NA	NA	NA	4	2
2-3C-W	Equipment Access Area - Wraparound	683'-0"	NA	NA	NA	NA	5	3
2-4A-N	Containment Access Area - North	719'-0"	NA	NA	11	6	3	2
2-4A-S	Containment Access Area - South	719'-0"	NA	NA	10	5	NA	NA
2-4A-S	Containment Access Area Elevator Lobby	719'-0"	NA	NA	1	1	NA	NA
2-4A-W	Containment Access Area - Wraparound	719'-0"	NA	NA	5	3	NA	NA
2-4B	Pipe Penetration Room	719'-1"	NA	NA	1	1	NA	NA
2-4C	Switchgear Room	719'-1"	NA	NA	2	1	NA	NA
2-4D	Switchgear Room	719'-1"	NA	NA	2	1	NA	NA
2-4G	Main Steam Pipeway	719'-1"	NA	NA	NA	NA	4*	2
2-4G	Exhaust Fan Room	799'-0"	NA	NA	NA	NA	2	1
2-5A-N	Standby Control Systems Area	749'-0"	NA	NA	16	8	7	4
2-5A-S	General Access Area - South	749'-0"	NA	NA	5	3	2	1
2-5A-S	General Access Area Elevator Lobby	749'-0"	NA	NA	1	1	NA	NA
2-5A-W	Access Corridor - Wraparound	749'-0"	NA	NA	3	2	2	1
2-5B	Valve Access Area	761'-10"	NA	NA	NA	NA	4	2
2-5C	RWCU Backwash Tank	749'-1"	NA	NA	NA	NA	1	1
2-5D	RWCU Pumps & Heat Exchangers	749'-1"	NA	NA	NA	NA	8	4
2-5E	Penetration Room	749'-1"	NA	NA	NA	NA	2	1
2-5F	Load Center Room	749'-1"	NA	NA	2	1	NA	NA
2-5G	Load Center Room	749'-1"	NA	NA	2	1	NA	NA
2-5H	Instrument Repair Room	749'-1"	NA	NA	2	1	NA	NA
2-6A	Access Area	779'-1"	NA	NA	11	6	NA	NA
2-6B	Load Center Room	779'-1"	NA	NA	4	2	NA	NA
2-6C	Electrical Equipment Room	779'-1"	NA	NA	2	1	NA	NA
2-6D	H&V Equipment Room	779'-1"	NA	NA	12	6	NA	NA
2-6E	Hatch and Laydown Area	779'-1"	NA	NA	2	1	NA	NA
2-7A	H&V Fan & Filter Rooms	799'-1"	NA	NA	14	7	NA	NA
2-7A	HVAC Filter 2F257A High Temp. Alarm	799'-0"	7	4	NA	NA	NA	NA
2-7A	HVAC Filter 2F257A DS-281	799'-0"	7	4	NA	NA	NA	NA
2-7A	HVAC Filter 2F257B High Temp. Alarm	799'-0"	7	4	NA	NA	NA	NA
2-7A	HVAC Filter 2F257B DS-282	799'-0"	7	4	NA	NA	NA	NA
2-7A	HVAC Filter 2F217A High Temp. Alarm	799'-0"	5	3	NA	NA	NA	NA
2-7A	HVAC Filter 2F217A DS-283	799'-0"	5	3	NA	NA	NA	NA
2-7A	HVAC Filter 2F217B High Temp. Alarm	799'-0"	5	3	NA	NA	NA	NA

* Inaccessible

TABLE 3.7.3.8-1
FIRE DETECTION INSTRUMENTATION

INSTRUMENT LOCATION			INSTRUMENT OPERABLE					
			HEAT		IONIZATION		PHOTO ELECTRIC	
FIRE ZONE	ROOM OR AREA	ELEV.	TOTAL	MIN.	TOTAL	MIN.	TOTAL	MIN.
2-7A	HVAC Filter 2F217B DS-284	799'-0"	5	3	NA	NA	NA	NA
0-6G	Surge Tank Vault	779'-4"	NA	NA	2	1	NA	NA
0-8A	Refueling Floor	818'-1"	NA	NA	NA	NA	60	30
0-8A	Refueling Floor Elevators	818'-1"	NA	NA	2	1	NA	NA
c.	*ESW Pumphouse*							
0-51	Pump Room	685'-6"	NA	NA	6	3	NA	NA
0-52	Pump Room	685'-6"	NA	NA	6	3	NA	NA
c.	*ESW Pumphouse*							
0-51	Pump Room	685'-6"	NA	NA	6	3	NA	NA
0-52	Pump Room	685'-6"	NA	NA	6	3	NA	NA
d.	*Diesel Generator Building*		*HEAT*		*INFRA-RED*		*PHOTO-ELECTRIC*	
0-41A	Diesel Generator "A" Bay	660'-0" & 677'-0"	22	11	2	1	15	8
		710'-9"	N/A	N/A	N/A	N/A	8	4
0-41B	Diesel Generator "B" Bay	660'-0" & 677'-0"	23	12	2	1	15	8
		710'-9"	N/A	N/A	N/A	N/A	9	5
0-41C	Diesel Generator "C" Bay	660'-0" & 677'-0"	22	11	2	1	15	8
		710'-9"	N/A	N/A	N/A	N/A	8	4
0-41D	Diesel Generator "D" Bay	660'-0" & 677'-0"	22	11	2	1	15	8
		710'9"	N/A	N/A	N/A	N/A	8	4
e.	*Diesel Generator E Building*		*HEAT*		*INFRA-RED*		*IONIZATION*	
0-41E	Diesel Generator Rooms	656'-6" &	1	1	NA	NA	21	11
		675'-6" &	NA	NA	6	3	3	2
		708'-0"	NA	NA	4	2	NA	NA
f.	*Outside Area*		*HEAT*		*IONIZATION*		*PHOTO-ELECTRIC*	
0-00	Startup Transformer (0X103) DS-014	NA	10	5	NA	NA	NA	NA
0-00	Startup Transformer (0X104) DS-015	NA	12	6	NA	NA	NA	NA
0-00	ESS Transformer – DS-016							
	0X201	NA	6	3	NA	NA	NA	NA
	0X 213	NA	6	3	NA	NA	NA	NA
0-00	ESS Transformer – DS-017							
	0X203	NA	6	3	NA	NA	NA	NA
	0X211	NA	6	3	NA	NA	NA	NA

B 3.7.3.8 Fire Detection Instrumentation

BASES

TRO

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.

The basis for the detection instrumentation included within the scope of this TRO includes both Safety Related and Safe Shutdown System protection. Fire Detection Instrumentation associated with building elevators are listed as separate line items in Table 3.7.3.8-1 due to their specific function and their layout being in a vertical string.

ACTIONS

The Actions are defined to ensure proper corrective measures and compensatory actions are taken in response to the inoperable systems or components.

In the event that a portion of the fire detection instrumentation is inoperable, establishing hourly firewatch patrols in the affected areas is required to provide detection capability until the inoperable instrumentation is restored to OPERABILITY.

Inaccessible Fire Detection Instrumentation can affect the compensatory actions for inoperable Fire Rated Assemblies (Ref. TRO 3.7.3.7 and B 3.7.3.7).

Hourly Firewatch Patrols shall be completed once each clock hour. Individual zones on the hourly firewatch patrol shall be toured at intervals (i.e., zone A and back to zone A) of sixty minutes with a margin of fifteen minutes.

A continuous Firewatch must remain in the specified area at all times and must patrol the required fire zones in the specified area at least once per fifteen minutes with a margin of five minutes. The specified area can be as small as one fire zone or as large as a firewatch can reasonably patrol within the fifteen minute time period. The specified area is limited to two floors of the Control Structure or Reactor Buildings. The floors must be adjacent or serviced by an operable elevator.

(continued)

B 3.7.3.8 Fire Detection Instrumentation

BASES

ACTIONS (continued)

Areas exist within the plant where the posting of a firewatch does not provide acceptable radiological ALARA practices. For these inaccessible areas, alternate measures should be taken to assure an adequate level of fire protection is maintained.

TRS

The TRSs are defined to be performed at the specified Frequency to ensure that the Fire Detection Instrumentation is maintained OPERABLE.

The Surveillances are modified by a Note to indicate that when a detector is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 15 minutes for each detector. Upon completion of each detector test, or expiration of the 15 minute allowance, the detector must reset and alarm must clear, or the applicable Condition entered and Required Action taken. This note is based on the assumption of time to perform a detector test. Under normal conditions, it is expected that the detector would reset and alarm clear within minutes after detector test initiation. It is recognized that while the detector being tested is in the tripped condition, other alarms originating on the string of detectors being tested will be masked.

TRS 3.7.3.8.1 / TRS 3.7.3.8.2

The surveillance frequency of 12 months is based on NFPA 72-1996, National Fire Alarm Code.

TRS 3.7.3.8.3

Fire Detection Instrumentation that is inaccessible during unit operation is defined as those fire detection instruments that are located within high radiation areas or where access is limited due to operating conditions, AND remote testing capability (i.e., smoke tubes) does not exist. Inaccessible Fire Detection Instruments need only be tested when the Unit is in cold shutdown for longer than 48 hours, unless it has been tested in the previous 12 months. Inaccessible Fire Detection Instrumentation must then be surveilled during the cold shutdown prior to startup. Inaccessible Fire Detection Instrumentation remains OPERABLE during Unit operation even though the surveillance frequency for accessible Fire Detection Instrumentation may have been exceeded.

(continued)

B 3.7.3.8 Fire Detection Instrumentation

BASES

REFERENCES 1. FPRR Section 4.12