FPL

JUN 18 2001

L-2001-114

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D. C. 20555

Re: Turkey Point Units 3 and 4
Docket Nos. 50-250 and 251
Generic Letter 92-08 – Completion of Thermo-Lag Upgrade Implementation

In letter L-98-293, dated December 9, 1998, Florida Power and Light Company (FPL) stated that fire barrier upgrades for the indoor areas were completed. FPL also proposed completion schedules for outdoor areas. By letter dated July 9, 1999, the NRC issued a Confirmatory Order documenting the schedule for implementation of Thermo-Lag upgrades by December 31, 2001. The purpose of this letter is to notify the NRC that the Thermo-Lag upgrades at Turkey Point Units 3 and 4, mandated by the Confimatory Order issued by NRC on July 9, 1999, have been completed.

Thermo-Lag fire barrier upgrades for safe shutdown circuits for the outdoor areas, including the turbine building, are complete. During the exemption request process, NRC personnel requested that FPL provide an itemized listing of the safe shutdown functions and the methods of protection for the circuits in each fire zone. As documented in the submittals, FPL stated that the safe shutdown analysis was being re-evaluated under the Thermo-Lag upgrade effort and that specific circuits and methods of protection may change as a result of the re-evaluation.

The safe shutdown analysis re-evaluation was completed and Thermo-Lag upgrades were accomplished within the restrictions of the exemptions granted for the respective fire zones. As such, the technical basis and conclusions previously submitted in support of the exemption requests are not changed. The attachment with enclosed tables provides the changes in the method of raceway protection resulting from the safe shutdown analysis re-evaluation. These listings are formatted to reflect the organization and level of detail transmitted to the NRC by previous correspondence. It should be noted that this is a one-time submittal to reflect changes to the information previously listed in FPL and NRC correspondence. Any future changes will be performed in accordance with NRC regulations, exemptions, and the Turkey Point Units 3 and 4 Fire Protection Program.

Should there be any questions, please contact Steve Franzone at (305) 246-6228.

Very truly yours,

R. J. Hovey
Vice President
Turkey Point Plant

OIH

Attachment and Enclosure

A029

cc: Regional Administrator, Region II, USNRC
Senior Resident Inspector, USNRC, Turkey Point Plant
Turkey Point Project Manager, NRR, USNRC

Turkey Point Units 3 and 4
Thermo-Lag Upgrade

Revised Listing of Protected / Separated Safe Shutdown Raceways

The following tables (enclosed) list protected/separated raceways, and reflect changes to those listings included in the NRC correspondence referenced below. The enclosed tables represent the complete listings provided by the referenced NRC correspondence, with changes noted in the Remarks column.

Appendix to NRC letter dated 2/24/1998, "Raceways Requiring Fire Barrier Protection" [1,2]	10 Sheets
Appendix to NRC letter dated 10/8/1998 *(Raceways Requiring Fire Barrier Protection)* [3]	2 Sheets
Appendix 1 to NRC letter dated 5/5/1999 *(1-Hour Barriers TB Columns A to E)* [3,4]	2 Sheets
Appendix 3 to NRC letter dated 5/5/1999 *(25-Minute Barriers TB Columns E to Jc)* [5]	2 Sheets
Appendix 4 to NRC letter dated 5/5/1999 *(25-Minute Barriers Turbine Deck)*	1 Sheet

Notes

1. Pages 8 through 10 of the enclosed revision to the Appendix to NRC letter dated 2/24/1998, present a listing of the raceways crediting separation and therefore, do not require raceway protection.

2. Table 1 to NRC letter dated 5/4/1999 for Fire Zone (FZ) 106R included raceways that are actually in FZ 118. There are no protected raceways in FZ 106R, which is a portion of the Control Room gravel built-up roof. Therefore, the listing in Table 1 to NRC letter dated 5/4/1999 is not applicable to FZ 106R. All raceways of Table 1 to NRC letter dated 5/4/1999 are included in the enclosed revision of the Appendix to NRC letter dated 2/24/1998 under FZ 118.

3. Appendix 2 to NRC letter dated 5/5/1999 does not need any revision with respect to the 1-hour protected raceway listing. The functions listed in Appendix 2 to NRC letter dated 5/5/1999 are those of all cables included in the raceways although some of those functions may not be credited in the respective fire zone. Therefore, the functions listed in Appendix 2 to NRC letter dated 5/5/1999, may not match the listing in Appendix 1 to NRC letter dated 5/5/1999 (Fire Zones 80, 82, 85, 91, 92 and 105), or the Appendix to NRC letter dated 10/8/1998 (Fire Zones 79 and 88).

4. Appendix 1 to NRC letter dated 5/5/1999 is revised. The revisions are identified in the Remarks column. This list reflects SSD functions protected and credited in the respective fire zone.

5. Appendix 3 to NRC letter dated 5/5/1999 is equivalent to the Appendix to NRC letter dated 10/8/1998. The Appendix to NRC letter dated 10/8/1998 reflects protected functions in general terms compared to that in Appendix 3 to NRC letter dated 5/5/1999. The changes to the Appendix to NRC letter dated 10/8/98 are identified in the Remarks column. Note that revisions to Appendix 3 to NRC letter dated 5/5/1999 are made to be consistent with the Appendix to NRC letter dated 10/8/1998 and the noted revision.

Protected Raceways, Cables and Components

Fire Zone	Sys.	Component ID	Changes for Component ID	Protected Raceway ID	Changes for Protected Raceway ID	Cable Function	Remarks
OD 47	CCW	4P211B	No Change	4H1361 *	No Change	CCW pump control	
				PB4800	Add		
OD 54	CCW	3P211B	Delete	3H1372 *	Delete	CCW Pump control	Separated by >20 ft
OD 113	AFW	CV-4-2816	Delete	4K323	Delete	AFW flow control valve control (Train A)	Credit Manual Action
				4K369	Delete		Credit Manual Action
		CV-4-2817	Delete	4K265	Delete	AFW flow control valve control (Train A)	Credit Manual Action
				4K379	Delete		Credit Manual Action
				4K612	Delete		Credit Manual Action
		CV-4-2818	Delete	4K389	Delete	AFW flow control valve control (Train A)	Credit Manual Action
				4K614	Delete		Credit Manual Action
		CV-4-2831	No Change	4K1065	No Change	AFW flow control valve control (Train B)	
				4K1240	No Change		
				4K1243	No Change		
				4K1244	No Change		
				4K1407	No Change		
				4K1408	No Change		
				PB4519	No Change		
				TB4835	Delete		Duplicate listing
				TB4835	No Change		
		CV-4-2832	No Change	4K1068	Delete	AFW flow control valve control (Train B)	Conduit retagged as 4K1463
				4K1240	No Change		
				4K1243	No Change		
				4K1244	No Change		
				4K1407	No Change		
				4K1409	No Change		
				4K1463	Add		
				PB4519	No Change		
				TB4835	No Change		
				TB4835	Delete		Duplicate listing

* = Typographical error corrected from "N" to "H"

Protected Raceways, Cables and Components

Fire Zone	Sys.	Component ID	Changes for Component ID	Protected Raceway ID	Changes for Protected Raceway ID	Cable Function	Remarks
OD 113 (continued)	AFW	CV-4-2833	No Change	4K1066	No Change	AFW flow control valve control (Train B)	
				4K1240	No Change		
				4K1243	No Change		
				4K1244	No Change		
				4K1407	No Change		
				4K1410	No Change		
		CV-4-2833	No Change	PB4519	No Change	AFW flow control valve control (Train B)	
				TB4835	No Change		
				TB4835	Delete		Duplicate listing
		IP-4-479	Add	4K1455	Add	FW Bypass control Valve control	Protected for ZOI
				4K1456	Add		Protected for ZOI
		IP-4-489	Add	4K1455	Add	FW Bypass control Valve control	Protected for ZOI
				4K1457	Add		Protected for ZOI
		IP-4-499	Add	4K1455	Add	FW Bypass control Valve control	Protected for ZOI
				4K1458	Add		Protected for ZOI
		SV-4-479A	Add	4J1817	Add	FW Flow Bypass Valve control	Protected for ZOI
				4K1448	Add		Protected for ZOI
		SV-4-489A	Add	4J1817	Add	FW Bypass control Valve control	Protected for ZOI
				4K1450	Add		Protected for ZOI
		SV-4-499A	Add	4J1817	Add	FW Bypass control Valve control	Protected for ZOI
				4K1449	Add		Protected for ZOI
		SV-4-479B	Add	4K1429	Add	FW Bypass control Valve control	Protected for ZOI
				4K1440	Add		Protected for ZOI
		SV-4-489B	Add	4K1430	Add	FW Bypass control Valve control	Protected for ZOI
				4K1440	Add		Protected for ZOI
		SV-4-499B	Add	4K1431	Add	FW Bypass control Valve control	Protected for ZOI
				4K1440	Add		Protected for ZOI

Protected Raceways, Cables and Components

Fire Zone	Sys.	Component ID	Changes for Component ID	Protected Raceway ID	Changes for Protected Raceway ID	Cable Function	Remarks
OD 116	AFW	CV-3-2816	Delete	3K368	Delete	AFW flow control valve control (Train A)	Credit Manual Action
				3K369	Delete		Credit Manual Action
		CV-3-2817	Delete	3K574	Delete	AFW flow control valve control (Train A)	Credit Manual Action
				3K576	Delete		Credit Manual Action
				3K577	Delete		Credit Manual Action
		CV-3-2818	Delete	3K568	Delete	AFW flow control valve control (Train A)	Credit Manual Action
				3K570	Delete		Credit Manual Action
				3K585	Delete		Credit Manual Action
		CV-3-2831	Add	3K1072	Add	AFW flow control valve control (Train B)	
				3K1084	Add		
				3K1326	Add		
				3K1630	Add		
				3K1633	Add		
				3K1639	Add		
				TB3734	Add		
		CV-3-2832	Add	3K1072	Add	AFW flow control valve control (Train B)	
				3K1083	Add		
				3K1326	Add		
				3K1630	Add		
				3K1632	Add		
				3K1639	Add		
				TB3734	Add		
		CV-3-2833	Add	3K1072	Add	AFW flow control valve control (Train B)	
				3K1085	Add		
				3K1326	Add		
				3K1630	Add		
				3K1631	Add		
				3K1639	Add		
				TB3734	Add		
	CCW	4P211C	Add	3K2080	Add	CCW Pump 4C breaker control	
	EDG	3K4B	Add	3K1951	Add	EDG 3B control	
		4K4B	Add	3K2084	Add	EDG 4B control	
	HVAC	3V1B	Add	3A1379	Add	NCCF 3V1B control and power	
		3V1D AUTO	Add	3A1379	Add	NCCF 3V1D auto start control	

Protected Raceways, Cables and Components

Fire Zone	Sys.	Component ID	Changes for Component ID	Protected Raceway ID	Changes for Protected Raceway ID	Cable Function	Remarks
OD 116 (continued)	HVPDS	3B52	Add	3K1966	Add	MCC 3K power	
		4E21-SWGR4D	Add	3K2080	Add	4kV Bus 4B bus clearing	
		4KV SWGR 4D(B)	Add	3K2080	Add	4kV Bus 4D breaker control	
		EDG 4B BKR	Add	3K2080	Add	EDG 4B breaker control	
		SBO-TIE(4D)	Add	3K2080	Add	SBO tie-breaker control	
		SWGR 4D - BKR	Add	3K2080	Add	4kV Bus 4D breaker position input to Sequencer 4B	
		4B52	Add	3K2082	Add	MCC 4K power	
			Add	3K2083	Add		
		3E20-SWGR3D	Add	3K2085	Add	4kV Bus 3B bus clearing	
		4KV SWGR 4D(B)	Add	3K2085	Add	4kV Bus 4B-4D tie breaker control	
	ICW	4P9C	Add	3K2080	Add	ICW Pump 4C breaker control	
	LVPDS	4D36	Add	3K2081	Add	125V DC to EDG 4B DP 4D36	
		SWGR 4D	Add	3K2086	Add	125V DC to 4kV Switchgear 4D	
OD 114	MSS	POV-4-2604B	No Change	4K1403	No Change	Main Steam Isolation Valve control	
				4K1514	No Change		
				4K1518	No Change		
		POV-4-2605B	No Change	4K1402	No Change	Main Steam Isolation Valve control	
				4K1515	No Change		
				4K1518	No Change		
		POV-4-2606B	No Change	4K1401	No Change	Main Steam Isolation Valve control	
				4K1517	No Change		
				4K1518	No Change		

Protected Raceways, Cables and Components

Fire Zone	Sys.	Component ID	Changes for Component ID	Protected Raceway ID	Changes for Protected Raceway ID	Cable Function	Remarks
OD 115	MSS	POV-3-2604B	No Change	3K1624	No Change	Main Steam Isolation Valve control	
				3K1841	Delete		Zone identification discrepancy
				3K1843	Delete		Zone identification discrepancy
				3K1845	No Change		
				PB3946	Delete		Zone identification discrepancy
				PB3947	Delete		Zone identification discrepancy
		POV-3-2605B	No Change	3K1623	No Change	Main Steam Isolation Valve control	
				3K1624	Delete		Component identification discrepancy (POV-3-2604B)
				3K1841	Delete		Zone identification discrepancy
				3K1843	Delete		Zone identification discrepancy
				3K1844	No Change		
				3K1845	Delete		Component identification discrepancy (POV-3-2604B)
				PB3946	Delete		Zone identification discrepancy
				PB3947	Delete		Zone identification discrepancy
		POV-3-2606B	No Change	3K1622	No Change	Main Steam Isolation Valve control	
				3K1841	Delete		Zone identification discrepancy
		POV-3-2606	No Change	3K1842	No Change	Main Steam Isolation Valve control	
				PB3946	Delete		Zone identification discrepancy

Protected Raceways, Cables and Components

Fire Zone	Sys.	Component ID	Changes for Component ID	Protected Raceway ID	Changes for Protected Raceway ID	Cable Function	Remarks
OD 118	AFW	MOV-3-1403	Add	3J1782	Add	AFW Turb Stm Supply Vlv control	
			Add	3K1809	Add		
		T&T Valve	Add	3F1341	Add	AFW T&T Valve control	
			Add	3K1713	Add		
			Add	4J1760	Add		
	EDG	3E04B	Add	4J1760	Add	125V DC to EDG 3B Exciter	
	HVAC	E16F	No Change	4J1195	No Change	DC/Inverter HVAC E16F Power	
		V8B	Add	3F1574	Add	Auxiliary Building Exhaust Fan control	Protected for ZOI
			Add	3J2041	Add		Protected for ZOI
		NS74A	Add	4J2103	Add	Computer Room HVAC Chiller Unit	Protected until separated by >10ft
	HVPDS	3B50	Add	3J1946	Add	LC 3H power	
			Add	3J1947	Add		
			Add	3J1948	Add		
			Add	3J1949	Add		
			Add	3J1950	Add		
			Add	3J1951	Add		
			Add	PB7332	Add		
			Add	3J1965	Add	LC 3H and LC 4H control	
	LVPDS	SWGR 4D-DC(B)	Add	3J1919	Add	125V DC to 4kV Swgr 4D	Protected for ZOI
		3C23B-DC	Add	3K1763	Add	DC Supply to Seq Pnl 3C23B	
			Add	PB3903	Add		
		4B50-DC(B)	Add	4F1533	Add	125V DC to LC 4H (Train B)	
		SWGR 3D-DC(B)	Add	4J1987	Add	125V DC to 4kV Switchgear 3D (Train B)	Protected for ZOI
		LC, SWGR	Add	3F1341	Add	125V DC to LC 3B and 3D, Switchgear 3B and 4B	
		3C264	Add	3K1713	Add	125V DC to ASP 3C264	
		4C264	Add	4K1417	Add	125V DC to ASP 4C264	
		3P93	Add	3K1713	Add	120 V AC to ASP 3C264 via 3P93	
		4P93	Add	4K1417	Add	120V AC to ASP 4C264 via 4P93	
		4D36	Add	4J1988	Add	125V DC to EDG 4B DP 4D36	

Protected Raceways, Cables and Components

Fire Zone	Sys.	Component ID	Changes for Component ID	Protected Raceway ID	Changes for Protected Raceway ID	Cable Function	Remarks
OD 119	ICW	4P9B	No Change	4R067	No Change	ICW Pump 4P9B Power	
				4R077	No Change		
OD 120	ICW	3P9B	No Change	3R067	No Change	ICW Pump 3P9B Power	
				3R077	No Change		

Protected Raceways, Cables and Components

Fire Zone	Sys.	Component	Raceway	Cable Function	Redundant Counterpart	Remarks
47	CCW	4P211C	4H468 4H1418 PB4036	CCW Pump 4C control	CCW Pump 4B	Separated by >20 ft
54	CCW	3P211B	3H1372 PB3862	CCW Pump 3B control	CCW Pump 3C	Separated by >20 ft
		3P211C	3E 094 PB3036	CCW Pump 3C control	CCW Pump 3B	Separated by >20 ft
113	AFW	CV-4-2831		AFW Flow control valve (Train B)	AFW Flow control valve (Train A)	Protected by steel platform
		CV-4-2832		AFW Flow control valve (Train B)	AFW Flow control valve (Train A)	Protected by steel platform
		CV-4-2833		AFW Flow control valve (Train B)	AFW Flow control valve (Train A)	Protected by steel platform
114	MSS	POV-4-2604B	TB4945	MSIV Control	POV-4-2605B, -2606B and cables	Separated by >20 ft
		POV-4-2605B	TB4946	MSIV Control	POV-4-2604B, -2606B and cables	Separated by >20 ft
		POV-4-2606B	TB4947	MSIV Control	POV-4-2604B, -2605B and cables	Separated by >20 ft
115	MSS	POV-3-2604B	TB3933	MSIV Control	POV-3-2605B, -2606B and cables	Separated by >20 ft
		POV-3-2605B	TB3934	MSIV Control	POV-3-2604B, -2606B and cables	Separated by >20 ft
		POV-3-2606B	TB3935	MSIV Control	POV-3-2604B, -2605B and cables	Separated by >20 ft
116	AFW	CV-3-2831		AFW Flow control valve (Train B)	AFW Flow control valve (Train A)	Protected by steel platform
		CV-3-2832		AFW Flow control valve (Train B)	AFW Flow control valve (Train A)	Protected by steel platform
		CV-3-2833		AFW Flow control valve (Train B)	AFW Flow control valve (Train A)	Protected by steel platform
118	HVAC	E16D	4G1375	DC/INV RM HVAC E16D	E16E , E16F cables	Separated by >10 ft
		E16E	3J1875 3J1876 3J1903	DC/INV RM HVAC E16E	MCC 3D, E16D cables	Separated by >10 ft
		E16F	4J1946 4J1947	DC/INV RM HVAC E16F	MCC 3D, E16D cables	Separated by >10 ft
		E232/V76	4F1441 4F1443 4F1580	Elect Equip Rm HVAC E232	MCC 3D feeders	Separated by >10 ft
		S74A	3J1145	Cable Spread/Computer Room Chiller S74A/S75A	S74B, S75B, MCC 3D cables	Separated by >10 ft

Protected Raceways, Cables and Components

Fire Zone	Sys.	Component	Raceway	Cable Function	Redundant Counterpart	Remarks
118 (continued)	HVAC	S74A	3J1146 3J1147 3J1148 3J1149 3J1488 3J1489 4J2103 PB3606 PB3607	Cable Spread/Computer Room Chiller S74A/S75A	S74B, S75B, MCC 3D cables	Separated by >10 ft
		S74B	3F1431 3F1432 3F1515 3F1519 3F1590 3F1591 4J1186 4J1187 4J1188 4J1189 4J1200 4J1456 4J1457 PB4612 PB4613 PB7402 TB5497	Cable Spread/Computer Room Chiller S74B/S75B	S74A, S75A cables	Separated by >10 ft

Protected Raceways, Cables and Components

Fire Zone	Sys.	Component	Raceway	Cable Function	Redundant Counterpart	Remarks
118 (continued)	HVPDS	3B08	3F1484 3F1485 3F1486 3F1504 3F1505 3F1506 3F1507 3F1508 3F1509 PB7390 PB7391	MCC 3D feeders	S74A, E232, E16E, E16F cables	Separated by >10 ft

EXPLANATION OF TERMINOLOGY

1 **ZOI =**
Zone of Influence

2 **Zone Identification Discrepancy =**
Raceway was previously incorrectly identified in the specified fire zone. Raceway is deleted from the list for this zone since the raceway is actually located in a different fire zone.

3 **Duplicate Listing =**
Raceway was previously listed twice

4 **Component Identification Discrepancy =**
Raceway was incorrectly associated with a component. The correct component association is identifed in parentheses.

Post-fire Safe Shutdown Functions
Turkey Point Units 3 and 4
Protected Post-Fire Safe Shutdown Functions Protected by Fire Barriers
Outdoor Fire Zones 79-partial, 81, 84-partial, 86, 88-partial, 89-partial

Fire Zone	Safe Shutdown Function	Remarks
79-partial	Feedwater Supply	
	Component Cooling Water Pump control	See Note 1
	Component Cooling Water supply to RCP thermal barrier	Add
	4 kV Bus clearing, control and EDG controls	See Note 1
	Normal Containment Cooling	
	Mitigate Condensate Pump spurious loading	Delete (Manual Action provided)
	Mitigate Heater Drain Pump spurious loading	
	Intake Cooling Water Pump control	See Note 1
	Steam Generator level and pressure	See Note 1
	Reactor Coolant System pressure	See Note 1
	Hot Leg Temperature indication	
	Cold Leg Temperature indication	
	Main Steam Isolation Valve (MSIV) control	
	Pressurizer relief isolation	
	480V power supply and control	See Note 1
	DC Equipment/ Inverter Room air conditioning	
	Auxiliary Building Exhaust Fan control	Add
	125V DC control power	Add
	120V AC Sequencer control power	Add
	120V AC power to 4P93	Add
81	EDG breaker control	See Note 1
84-partial	Feedwater Supply	
	Component Cooling Water Pump control	See Note 1
	Component Cooling Water supply to RCP thermal barrier	
	Reactor Coolant System volume and chemistry control	
	Pressurizer Auxiliary Spray control	Delete
	4 kV Bus clearing, control and EDG controls	See Note 1
	Normal Containment Cooling	
	Containment Instrument Air supply	
	Steam Generator pressure and level	See Note 1
	Reactor Coolant System pressure	See Note 1
	Cold Leg Temperature indication	
	Hot Leg Temperature indication	
	Main Steam Isolation Valve (MSIV) control	
	Pressurizer heating and pressure control	See Note 1
	Pressurizer power operated relief control	
	480V power supply and control	See Note 1
	120V AC power supply	
	120V AC Sequencer control power	Add
	120V AC power to 3P93	Add
	125V DC control power	
	125V DC Sequencer control power	Add

Post-fire Safe Shutdown Functions
Turkey Point Units 3 and 4
Protected Post-Fire Safe Shutdown Functions Protected by Fire Barriers
Outdoor Fire Zones 79-partial, 81, 84-partial, 86, 88-partial, 89-partial

Fire Zone	Safe Shutdown Function	Remarks
86	Component Cooling Water Pump control	See Note 1
	4 kV Bus clearing, control and EDG controls	See Note 1
	Normal Containment Cooling	
	Intake Cooling Water Pump control	See Note 1
	480V power supply and control	See Note 1
	125 VDC control power	
88-partial	Feedwater Supply	Delete (Use AFW)
	Auxiliary Feedwater controls	Add
	Component Cooling Water Pump control	See Note 1
	4 kV Bus clearing, control and EDG controls	See Note 1
	Normal Containment Cooling	
	Intake Cooling Water Pump control	See Note 1
	480V power supply and control	See Note 1
	125V DC Sequencer control power	Add
	125V DC control power	Add
	120V AC power to 3P93	Add
	120V AC Sequencer control power	Add
89-partial	Auxiliary Feedwater controls	
	Component Cooling Water Pump control	See Note 1
	4 kV Bus clearing, control and EDG controls	See Note 1
	Normal Containment Cooling	
	Intake Cooling Water Pump control	See Note 1
	480V power supply and control	See Note 1
	Steam Generator pressure	Add
	125V DC control power	Add
	125V DC Sequencer control power	Add
	120V AC power supply	Add
	120V AC power to 3P93	Add
	120V AC Sequencer control power	Add

Note 1: Item changed to enhance or generalize the previous description to encompass additional functions

TURKEY POINT UNITS 3 AND 4
TURBINE BUILDING POST-FIRE SAFE SHUTDOWN FUNCTIONS
PROTECTED BY FIRE BARRIERS HAVING A 1-HOUR FIRE RESISTIVE RATING
COLUMN LINES A TO E

Fire Zone	Safe Shutdown Function Protected	Remarks
80	120V AC to Power Panel 4P93	Add
	125V DC to ASP 4C264	Add
	Unit 4 AFW Flow Control valves - Power and Control	See Note 3
	Unit 4 SG Level Instrumentation (Wide range)	
	Unit 4 Train B Cold Leg Temperature Instrumentation	
	Unit 4 Train B Hot Leg Temperature Instrumentation	
	Unit 4 RCS Pressure Instrumentation	
	Unit 4 SG Blowdown Flow Control Valve	
	Unit 4 Instrument Air Containment Isolation Valve	
	Unit 4 AFW Turbine Steam Valve - Control	
	Unit 4 AFW to SG Control Valve - Power	Delete - item consolidated, Note 3
	Unit 4 Main Steam Isolation Valve - Control	
	Normal Containment Cooling Fan 4D - Power and Control	See Note 3
	Normal Containment Cooling Fan 4B - Control	See Note 3
	Auxiliary Transformer Breaker Control - 4kV Bus 4B	Delete - not routed in this Fire Zone
	Startup Transformer Breaker Control - 4kV Bus 4B	Delete - not routed in this Fire Zone
	Heater Drain Pump 4B	Delete - not routed in this Fire Zone
	Unit 4 125 VDC for Feedwater Bypass Valve	Delete - not routed in this Fire Zone
	4160V Bus 4B Lockout	Delete - not routed in this Fire Zone
82	Normal Containment Cooling Fan 4D - Power and Control	See Note 3
	Normal Containment Cooling Fan 4B - Control	Delete - not required
	Auxiliary Transformer Breaker Control - 4kV Bus 4B	
	Unit 4 125 VDC for Feedwater Bypass Valve	Add
	Startup Transformer Breaker Control - 4kV Bus 4B	Add
	4160V Bus 4B Lockout	Add
	Heater Drain Pump 4B	Add
85	MCC 3K Feeder	
91	Unit 4 AFW Flow Control valves - Power and Control	See Note 3
	Unit 4 SG Level Instrumentation (Wide range) (Note 2)	
	Unit 4 Train B Cold Leg Temperature Instrumentation	
	Unit 4 Train B Hot Leg Temperature Instrumentation	
	Unit 4 RCS Pressure Instrumentation	
	Unit 4 SG Blowdown Flow Control Valve	
	Unit 4 Instrument Air Containment Isolation Valve	
	Unit 4 AFW Turbine Steam Valve - Control	
	Unit 4 AFW to SG Control Valve - Power	Delete - item consolidated, Note 3
	Unit 4 Main Steam Isolation Valve - Control	
	Normal Containment Cooling Fan 4D - Power and Control	See Note 3
	Normal Containment Cooling Fan 4B - Control	Delete - not required
	Auxiliary Transformer Breaker Control - 4kV Bus 4B	
	Startup Transformer Breaker Control - 4kV Bus 4B	
	Heater Drain Pump 4B	
	Unit 4 125 VDC for Feedwater Bypass Valve	
	4160V Bus 4B Lockout	
	125 VDC Control Power to various components	Add
	120 VAC to Power Panel 4P93	Add

TURKEY POINT UNITS 3 AND 4
TURBINE BUILDING POST-FIRE SAFE SHUTDOWN FUNCTIONS
PROTECTED BY FIRE BARRIERS HAVING A 1-HOUR FIRE RESISTIVE RATING
COLUMN LINES A TO E

Fire Zone	Safe Shutdown Function Protected	Remarks
92	120 VAC to 3B Load Sequencer MCC 3K Feeder	
105	Normal Containment Cooling Fan 3B - Power and Control NCCF 4D control 125 VDC Control Power to various components 120 VAC to 3B Load Sequencer 125 VDC to 4160V Bus 3D EDG 3B Control Auxiliary Transformer Breaker Control - 4kV Bus 4B Startup Transformer Breaker Control - 4kV Bus 4B Heater Drain Pump 4B Unit 4 125 VDC for Feedwater Bypass Valve 4160V Bus 4B Lockout Condensate Pump 4B	Delete - not required Add Add Delete - not routed in this Fire Zone Typo corrected

Notes:

1. Manual actions may be used to overcome adverse effects to certain circuits of NCC Fans 4B and 4D.
2. Narrow range instrumentation may be used for post-fire safe shutdown under certain fire damage conditions.
3. Safe Shutdown Function description changed to enhance or generalize the previous description to encompass additional functions.

TURKEY POINT UNITS 3 AND 4
TURBINE BUILDING POST-FIRE SAFE SHUTDOWN FUNCTIONS
PROTECTED BY FIRE BARRIERS HAVING A 25-MINUTE FIRE RESISTIVE RATING
COLUMN LINES E TO Jc

Fire Zone	Safe Shutdown Function
79	Feedwater Supply Component Cooling Water Pump control Component Cooling Water supply to RCP thermal barrier 4 kV Bus clearing, control and EDG controls Normal Containment Cooling Mitigate Heater Drain Pump spurious loading Intake Cooling Water Pump control Steam Generator level and pressure Reactor Coolant System pressure Hot Leg Temperature indication Cold Leg Temperature indication Main Steam Isolation Valve (MSIV) control Pressurizer relief isolation 480V power supply and control DC Equipment/ Inverter Room air conditioning Auxiliary Building Exhaust Fan control 125V DC control power 120V AC Sequencer control power 120V AC power to 4P93
84	Feedwater Supply Component Cooling Water Pump control Component Cooling Water supply to RCP thermal barrier Reactor Coolant System volume and chemistry control 4 kV Bus clearing, control and EDG controls Normal Containment Cooling Containment Instrument Air supply Steam Generator pressure and level Reactor Coolant System pressure Cold Leg Temperature indication Hot Leg Temperature indication Main Steam Isolation Valve (MSIV) control Pressurizer heating and pressure control Pressurizer power operated relief control 480V power supply and control 120V AC power supply 120V AC Sequencer control power 120V AC power to 3P93 125V DC control power 125V DC Sequencer control power

TURKEY POINT UNITS 3 AND 4
TURBINE BUILDING POST-FIRE SAFE SHUTDOWN FUNCTIONS
PROTECTED BY FIRE BARRIERS HAVING A 25-MINUTE FIRE RESISTIVE RATING
COLUMN LINES E TO Jc

Fire Zone	Safe Shutdown Function
88	Auxiliary Feedwater controls Component Cooling Water Pump control 4 kV Bus clearing, control and EDG controls Normal Containment Cooling Intake Cooling Water Pump control 480V power supply and control 125V DC Sequencer control power 125V DC control power 120V AC power to 3P93 120V AC Sequencer control power
89	Auxiliary Feedwater controls Component Cooling Water Pump control 4 kV Bus clearing, control and EDG controls Normal Containment Cooling Intake Cooling Water Pump control 480V power supply and control Steam Generator pressure 125V DC control power 125V DC Sequencer control power 120V AC power supply 120V AC power to 3P93 120V AC Sequencer control power

Note: Appendix 3 to NRC letter dated 5/5/1999 is revised to reflect general description of protected functions. This approach makes Appendix 3 similar to the Appendix to NRC letter dated 10/8/1998.

TURKEY POINT UNITS 3 AND 4
TURBINE BUILDING POST-FIRE SAFE SHUTDOWN FUNCTIONS
PROTECTED BY FIRE BARRIERS HAVING A 25-MINUTE FIRE RESISTIVE RATING
TURBINE DECK

Fire Zone	Safe Shutdown Function Protected	Remarks
117	Unit 3 Main Steam Isolation Valve - Control	
	Unit 4 Main Steam Isolation Valve - Control	
	Unit 3 SG Pressure Instrumentation	Protection not required. Redundant instrumentation in FZ 84
	Unit 4 SG Pressure Instrumentation	Protection not required. Redundant instrumentation in FZ 79