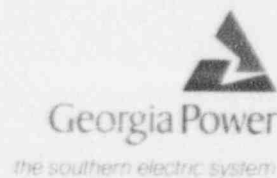


Georgia Power Company
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Post Office Box 1295
Birmingham, Alabama 35201
Telephone 205 877-7122

C. K. McCoy
Vice President, Nuclear
Vogtle Project

April 16, 1993



Docket Nos. 50-424
50-425

ELV-05296

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

**VOGTLE ELECTRIC GENERATING PLANT
RESPONSE TO GENERIC LETTER 92-08**

Gentlemen:

On December 17, 1992, the NRC issued Generic Letter (GL) 92-08, "Thermo-Lag 330-1 Fire Barriers." The generic letter was issued to obtain additional information needed from licensees to verify that Thermo-Lag 330-1 fire barrier systems manufactured by Thermal Science, Incorporated (TSI) comply with NRC's requirements. The generic letter requires that all addressees, pursuant to 10 CFR 50.54 (f), submit a written report within 120 days from the date of the generic letter. Where applicable, the written report can reference previous responses to Bulletin 92-01 and Supplement 1 to Bulletin 92-01 in its response to this generic letter.

The enclosure to this letter lists each item as it appears in the generic letter and provides the response for the Vogtle Electric Generating Plant.

Mr. C. K. McCoy states that he is a vice president of Georgia Power Company and is authorized to execute this oath on behalf of Georgia Power Company and that, to the best of his knowledge and belief, the facts set forth in this letter and enclosure are true.

Sincerely,

C. K. McCoy
C. K. McCoy

Sworn to and subscribed before me

this 16th day of April 1993

Mary N. Bentley
Notary Public

My Commission Expires: _____

MY COMMISSION EXPIRES MAY 6, 1995

xc: See next page

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U. S. Nuclear Regulatory Commission

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CKM/PAH/gmb

Enclosure

xc: Georgia Power Company

Mr. W. B. Shipman

Mr. M. Sheibani

NORMS

U. S. Nuclear Regulatory Commission

Mr. S. D. Ebnetter, Regional Administrator

Mr. D. S. Hood, Licensing Project Manager, NRR

Mr. B. R. Bonser, Senior Resident Inspector, Vogtle

ELV-05296

#003194

ENCLOSURE

VOGTLE ELECTRIC GENERATING PLANT RESPONSE TO GENERIC LETTER 92-08

Generic Letter 92-08, "Thermo-Lag 330-1 Fire Barriers," lists several specific items concerning Thermo-Lag fire barrier material which require a written response. Each item is transcribed from the generic letter and the response for the Vogtle Electric Generating Plant (VEGP) follows.

GL 92-08, item 1:

State whether Thermo-Lag 330-1 barriers are relied upon (a) to meet 10 CFR 50.48, to achieve physical independence of electrical systems, (b) to meet a condition of a plant's operating license, or (c) to satisfy a licensing commitment. If applicable, state that Thermo-Lag 330-1 is not used at the facility. This generic letter applies to all 1-hour and all 3-hour Thermo-Lag 330-1 materials and barrier systems assembled by any assembly method such as by assembling preformed panels and conduit shapes, as well as spray, trowel and brush-on applications.

Response to item 1:

Thermo-Lag barriers are relied upon to meet 10 CFR 50.48 by protecting safe shutdown circuits as previously discussed in responses to Bulletin 92-01 and Supplement 1. Thermo-Lag is also used to achieve physical independence of electrical systems. Thermo-Lag barriers are not used to meet a specific condition of the plant's operating license. There are no specific licensing commitments pertaining to Thermo-Lag 330-1.

GL 92-08, item 2:

If Thermo-Lag 330-1 barriers are used at the facility,

- a) State whether or not the licensee has qualified the Thermo-Lag 330-1 fire barriers by conducting fire endurance tests in accordance with the NRC's requirements and guidance or licensing commitments.
- b) State (1) whether or not the fire barrier configurations installed in the plant represent the materials, workmanship, methods of assembly, dimensions, and configurations of the qualification test assembly configurations; and (2) whether or not the licensee has evaluated any deviations from the tested configurations.
- c) State (1) whether or not the as-built Thermo-Lag 330-1 barrier configurations are consistent with the barrier configurations used during the ampacity derating tests relied upon by the licensee for the ampacity derating factors used for all raceways protected by Thermo-Lag 330-1 (for fire protection of safe shutdown capability or to achieve physical independence of electrical systems) and (2) whether or not the ampacity derating test results relied upon by the licensee are correct and applicable to the plant design.

ENCLOSURE (CONTINUED)

VOGTLE ELECTRIC GENERATING PLANT
RESPONSE TO GENERIC LETTER 92-08

Response to item 2a:

Georgia Power Company (GPC) did not conduct independent fire endurance tests on Thermo-Lag material. GPC utilized test reports supplied by the vendor to demonstrate product acceptability in accordance with NRC practices that existed at that time. Thermo-Lag material was accepted for use at the Vogtle Electric Generating Plant after evaluation of fire barrier materials conducted by the architect-engineer.

In general, tests were not required to be conducted by licensees as long as vendor test reports were reviewed for acceptability by the licensee or its agents. Vendor test reports were maintained for NRC review. Test reports were only submitted where they were specifically requested by the NRC staff.

Response to item 2b:

Georgia Power Company attempted to install Thermo-Lag 330-1 fire barriers in configurations which matched tested configurations to the extent possible. However, because of the many configurations encountered during construction, some deviations exist. Guidance existing at the time of initial barrier qualification did not require consideration of all of the above attributes in comparison of tested to installed configurations. Deviations from tested configurations should comply with existing regulatory guidance at the time of installation.

Fire barrier configurations using Thermo-Lag 330-1 which deviated from tested configurations had Field Change Requests (FCRs) initiated by site construction personnel. The FCRs were evaluated by design engineering personnel for acceptability.

Response to item 2c:

Initial ampacity derating tests relied upon by GPC at VEGP were provided by TSI. Subsequently, the engineering calculations were revised, and a much greater factor for ampacity derating was utilized for both units at VEGP. The ampacity derating utilized at VEGP provides an acceptable level of performance and has adequate conservatism based on tests results reviewed to date. New testing by NUMARC for utilities is expected to confirm that the ampacity derating values used at VEGP are acceptable.

For many installed configurations, upgrades may be developed through the NUMARC testing program. These upgrades may involve other applications of additional fire barrier material to installed configurations and may require further ampacity derating tests or analytical methods to extrapolate the results of baseline ampacity testing.

ENCLOSURE (CONTINUED)

VOGTLE ELECTRIC GENERATING PLANT
RESPONSE TO GENERIC LETTER 92-08

GL 92-08, Item 3:

With respect to any answer to items 2(a), 2(b), or 2(c) above in the negative, (a) describe all corrective actions needed and include a schedule by which such actions shall be completed and (b) describe all compensatory measures taken in accordance with the Technical Specifications or administrative controls. When corrective actions have been completed, confirm in writing their completion.

Response to Item 3a:

Although barriers were evaluated and qualified consistent with existing guidance at the time, further actions are now necessary to address the fire endurance and ampacity derating of the Thermo-Lag program sponsored by NUMARC, which is intended to provide generic testing and information necessary to resolve both the fire endurance and ampacity derating issues.

The program activities concerning fire endurance of Thermo-Lag 330-1 fire barriers are aimed at identifying configurations which will meet the requirements for a 1- or 3-hour rated fire barrier and upgrading existing barriers to conform to these configurations. In some cases, other options may be available and preferable based on cost. In other cases it may be cost effective to reroute cables, modify circuits, or replace the Thermo-Lag with another type of fire barrier in order to meet the applicable regulatory requirements. These determinations will be made on a case-by-case basis once the information from the NUMARC testing program has been received.

Since GPC's decisions for resolution of this issue depend on activities which will be occurring on an industry-wide basis through NUMARC, it is not practical for GPC to attempt to provide specific dates for which activities applicable to VEGP will be complete. Compensatory measures described in GPC's responses to NRC Bulletin 92-01 and its Supplement 1 will remain in effect until all issues relating to the qualification of Thermo-Lag 330-1 fire barrier have been resolved. When all actions necessary to resolve this issue are complete, GPC will confirm in writing their completion, and only then will the current compensatory measures be terminated.

Response to Item 3b:

Compensatory measures taken at VEGP are described in the responses to I. E. Bulletin 92-01 and Supplement 1 to this bulletin. No other compensatory measures have been taken.

ENCLOSURE (CONTINUED)

VOGTLE ELECTRIC GENERATING PLANT
RESPONSE TO GENERIC LETTER 92-08

GL 92-08, Item 4:

List all Thermo-Lag 330-1 barriers for which answers to item 2 cannot be provided in the response due within 120 days from the date of this generic letter, and include a schedule by which such answers shall be provided.

Response to Item 4:

Table 1, which was previously provided in response to Bulletin 92-01 and its supplement, identified raceways wrapped with Thermo-Lag 330-1 where the barrier serves as a 3-hour barrier per CMEB 9.5-1. Table 2 lists raceways containing safe shutdown cables where Thermo-Lag 330-1 wrap serves as a Regulatory Guide 1.75 barrier and where Thermo-Lag is also used as a radiant energy shield. Table 3 lists other safety related applications of Thermo-Lag 330-1 wrap

The schedule for completion of these activities will be commensurate with the NUMARC effort described in item 3.

TABLE 2
UNITS 1 & 2

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BLDG	FIRE AREA/ZONE	ROOM	RACEWAY	TYPE	SIZE	CABLE(S)	DESCRIPTON/FUNCTION
CB	1-CB-LC-B/80	B50	1DE311RX145	C	4"	14CQPS4AXR 14CQPS4AZA 14CQPS4AZD 14CQPS4XE 14CQPS4XL	PRESSURIZER PRESSURE PT-0458 STEAM GENERATOR LEVEL S/G 2 LT-0527 STEAM GENERATOR LEVEL S/G 3 LT-0537 STEAM GENERATOR LEVEL S/G 1 LT-0517 STEAM GENERATOR LEVEL S/G 4 LT-0547
CB	1-CB-LC-B/80	B50	1DE311RS124	C	4"	1DY1B07SA	SLD. ST PROT. PNL-A 1-1605-Q5-SPA POWER FEEDER
CB	1-CB-LC-B/138	B42	1BE311RS149	C	2"	1BD1203SB	TERMINATION CABINET 1BCPT04 1-1601-U3-T04 FDR
CB	1-CB-LC-B/138	B42	1BE321RS172	C	1"	1BD1109SA	REACTOR TRIP SWGR 1-1606-S6-002
CB	1-CB-LC-B/80	B50	1DE311RX141	C	4"	14CQPS4AYA 14CQPS4XN 14CQPS4XP 14RV289XA	BAST LEVEL 1LT-0104 STEAM LINE PRESSURE S/G 1 PT-0516 STEAM LINE PRESSURE S/G 4 PT-0546 NSCW PUMPS DISCHARGE TRAIN B PRESSURE PT 11742
CB	1-CB-LC-B/80	B50	1DE311RX142	C	4"	14CQPS4AZL	FTO917
CB	1-CB-LC-B/80	B50	1DE311RS072	C	4"	1DD101SA 1DD101SB	125V DC SWGR 1DD1 INCM BRKR 1DD101 (BAT) 125V DC SWGR 1DD1 INCM BRKR 1DD101 (BAT)
CB	1-CB-LC-B/80	B50	1DE31DRL038	C	2"	1DY1B10LA	SOLID STATE PROT PNL-B 1-1605-Q5-SPB POWER FDR
CB	1-CB-LC-B/80	B50	1DE311RX144	C	4"	14RPTRD4X2	CORE EXIT THERMOCOUPLES

ORIGINAL

TABLE 2
UNITS 1 & 2

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PAGE 2 OF 12

BLDG	FIRE AREA/ZONE	ROOM	RACEWAY	TYPE	SIZE	CABLE(S)	DESCRIPTON/FUNCTION
						14RPTRD4X3	CORE EXIT THERMOCOUPLES
						14RPTRD4X4	CORE EXIT THERMOCOUPLES
						14RPTRD4XA	CORE EXIT THERMOCOUPLES
						14RPTRD4XB	CORE EXIT THERMOCOUPLES
						14RPTRD4XC	CORE EXIT THERMOCOUPLES
						14RPTRD4XD	CORE EXIT THERMOCOUPLES
						14RPTRD4XE	CORE EXIT THERMOCOUPLES
						14RPTRD4XF	CORE EXIT THERMOCOUPLES
						14RPTRD4XG	CORE EXIT THERMOCOUPLES
						14RPTRD4XH	CORE EXIT THERMOCOUPLES
						14RPTRD4XJ	CORE EXIT THERMOCOUPLES
						14RPTRD4XK	CORE EXIT THERMOCOUPLES
						14RPTRD4XL	CORE EXIT THERMOCOUPLES
						14RPTRD4XM	CORE EXIT THERMOCOUPLES
						14RPTRD4XN	CORE EXIT THERMOCOUPLES
						14RPTRD4XP	CORE EXIT THERMOCOUPLES
						14RPTRD4XQ	CORE EXIT THERMOCOUPLES
						14RPTRD4XR	CORE EXIT THERMOCOUPLES
						14RPTRD4XS	CORE EXIT THERMOCOUPLES
						14RPTRD4XT	CORE EXIT THERMOCOUPLES
						14RPTRD4XU	CORE EXIT THERMOCOUPLES
						14RPTRD4XV	CORE EXIT THERMOCOUPLES
						14RPTRD4XW	CORE EXIT THERMOCOUPLES
						14RPTRD4XX	CORE EXIT THERMOCOUPLES
						14RPTRD4XY	CORE EXIT THERMOCOUPLES
						14RPTRD4XZ	CORE EXIT THERMOCOUPLES
						14RPTRD4X1	CORE EXIT THERMOCOUPLES
CTB	1-CTB/140A	*B03	1ARJB0051	JB	N/A	11CQPS1AXS	PRESSURIZER PRESSURE PT-0455
						11CQPS1AXT	PRESSURIZER PRESSURE PT-0455
CTB	1-CTB/140A	*B03	1AE51ARX360	C	3/4"	11CQPS1AXS	PRESSURIZER PRESSURE PT-0455
CTB	1-CTB/140A	*B03	1AE51ARX313	C	1"	1AR0442AXF	LETDOWN TO PRZ TANK VALVES 1HV-0442A
						1AR0442AXG	LETDOWN TO PRZ TANK VALVES 1HV-0442A
CTB	1-CTB/140A	*B03	1AE51ARX322	C	3/4"	11CQPS1AXT	PRESSURIZER PRESSURE PT-0455

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TABLE 2
UNITS 1 & 2

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BLDG	FIRE AREA/ZONE	ROOM	RACEWAY	TYPE	SIZE	CABLE(S)	DESCRIPTION/FUNCTION
AUX	1-AB-LD-A/11B	B50	1DE413RX598	C	2"	14CQPS4AZL	FT0917
CTB	1-CTB/140A	*B03	1AE51ARX321	C	3/4"	11CQPS1AXV	Pressurizer Level 1LT-0459
CTB	1-CTB/140A	*B03	1AE51ARX323	C	3/4"	11CQPS1AXW	Pressurizer Level 1LT-0459
CTB	1-CTB/140C	*B02	1BE512RX065	C	3/4"	12CQPS2AXC	RCS Wide Range Pressure 1PT-0403
CTB	1-CTB/140C	*A02	1BE513RX059	C	3/4"	12CQPS2AXB	RCS Wide Range Pressure 1PT-0403
CTB	1-CTB/140A	*B03	1ARJB0056	JB	N/A	11CQPS1AXV	PRESSURIZER LEVEL 1LT-0459
CTB	1-CTB/140A	*B03	1AE51AKXJ95	JB	N/A	11CQPS1AXW	PRESSURIZER LEVEL 1LT-0459
						11CQPS1AXS	PRESSURIZER PRESSURE PT-0455
						11CQPS1AXV	PRESSURIZER LEVEL 1LT-0459
						1AR0442AXF	LETDOWN TO PRZ TANK VALVES 1HV-0442A
						1AR0442AXG	LETDOWN TO PRZ TANK VALVES 1HV-0442A
CTB	1-CTB/140C	*A02	1BE513KXJ01	JB	N/A	12CQPS2AXB	RCS WIDE RANGE PRESSURE 1PT-0403
CTB	1-CTB/140A	*B03	1BE51BKXJ01	JB	N/A	12CQPS2AXB	RCS WIDE RANGE PRESSURE 1PT-0403
CTB	1-CTB/140C	*A02	1BE51BKXJ02	JB	N/A	12CQPS2AXB	RCS WIDE RANGE PRESSURE 1PT-0403
CTB	1-CTB/140C	*B02	1BRJB0050	JB	N/A	12CQPS2AXB	RCS WIDE RANGE PRESSURE 1PT-0403
						12CQPS2AXC	RCS WIDE RANGE PRESSURE 1PT-0403
CTB	1-CTB/140C	*B02	1-PT-0403	I	N/A	REFER TO CABLES OR CONDUITS	
CTB	1-CTB/140A	*B03	1-LT-0459	I	N/A	REFER TO CABLES OR CONDUITS	
TUN	1-CB-LB-D/144	1T4B	1CE7C3KPH01	JB	N/A	1CD1116SA	TURB DRV. AFWP CONT PNL 1-1302-P5-AFP FDR
						1CD1M01SE	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5120

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TABLE 2
UNITS 1 & 2

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BLDG	FIRE AREA/ZONE	ROOM	RACEWAY	TYPE	SIZE	CABLE(S)	DESCRIPTON/FUNCTION
						1CD1M01SF	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5120
						1CD1M02SE	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5122
						1CD1M02SF	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5122
						1CD1M03SE	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5125
						1CD1M03SF	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5125
						1CD1M04SF	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5127
						1CD1M04SG	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5127
						1CD1M05LA	AUX FW TURBINE DRIVEN STEAM INLET VALVE 1HV-5106
						1CD1M05LB	AUX FW TURBINE DRIVEN STEAM INLET VALVE 1HV-5106
						1CD1M05SD	AUX FW TURBINE DRIVEN STEAM INLET VALVE 1HV-5106
						1CD1M05SE	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 1HV-5106
						1CD1M05SF	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 1HV-5106
						1CD1M05SG	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 1HV-5106
						1CD1M06LA	AUX FW-COND STO TK V4001 TO PUMP P4001 1HV-5113
						1CD1M06LB	FW-COND STO TK V4001 TO PUMP P4001 1HV-5113
						1CD1M06SB	AUX FW-COND STO TK V4001 TO PUMP P4001 1HV-5113
						1CD1M06SC	AUX FW-COND STO TK V4001 TO PUMP P4001 1HV-5113
						1CD1M06SD	AUX FW-COND STO TK V4001 TO PUMP P4001 1HV-5113
						1CD1M06SE	AUX FW-COND STO TK V4001 TO PUMP P4001 1HV-5113
						1CH12010SA	AUX FDW PUMP HOUSE DSA DAMPER 1HV-12012

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TABLE 2
UNITS 1 & 2

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BLDG	FIRE AREA/ZONE	ROOM	RACEWAY	TYPE	SIZE	CABLE(S)	DESCRIPTON/FUNCTION
						1CWPAFTSB	AUX FDW TURB OVER SPEED TRIP RESET CKT
						1CWPAFTSE	AUX FDW TURB OVER SPEED TRIP RESET CKT
TUN	1-CB-LB-D/144	1T4B	1CE7C3KPH02	JB	N/A	1CD1116SA	TURB DRV. AFWP CONT PNL 1-1302-P5-AFP FDR
						1CD1M01SE	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5120
						1CD1M01SF	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5120
						1CD1M02SE	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5122
						1CD1M02SF	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5122
						1CD1M03SE	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5125
						1CD1M03SF	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5125
						1CD1M04SF	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5127
						1CD1M04SG	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5127
						1CD1M05LA	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 1HV-5106
						1CD1M05LB	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 1HV-5106
						1CD1M05SD	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 1HV-5106
						1CD1M05SE	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 1HV-5106
						1CD1M05SF	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 1HV-5106
						1CD1M05SG	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 1HV-5106
						1CD1M06LA	AUX FW-COND STO TK V4001 TO PUMP P4001 1HV-5113
						1CD1M06LB	AUX FW-COND STO TK V4001 TO PUMP P4001 1HV-5113

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TABLE 2
UNITS 1 & 2

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BLDG	FIRE AREA/ZONE	ROOM	RACEWAY	TYPE	SIZE	CABLE(S)	DESCRIPTON/FUNCTION
						1CD1M06SB	AUX FW-COND STO TK V4001 TO PUMP P4001 1HV-5113
						1CD1M06SC	AUX FW-COND STO TK V4001 TO PUMP P4001 1HV-5113
						1CD1M06SD	AUX FW-COND STO TK V4001 TO PUMP P4001 1HV-5113
						1CD1M06SE	AUX FW-COND STO TK V4001 TO PUMP P4001 1HV-5113
						1CH12010SA	AUX FDW PUMP HOUSE DSA DAMPER 1HV-12012
						1CWPAFTSB	AUX FDW TURB OVER SPEED TRIP RESET CKT
						1CWPAFTSE	AUX FDW TURB OVER SPEED TRIP RESET CKT
TUN	1-CB-LB-D/144	1T4B	1CE7C3KPH03	JB	N/A	1CD1116SA	TURB DRV. AFWP CONT PNL 1-1302-P5-AFP FDR
						1CD1M01SE	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5120
						1CD1M01SF	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5120
						1CD1M02SE	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5122
						1CD1M02SF	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5122
						1CD1M03SE	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5125
						1CD1M03SF	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5125
						1CD1M04SF	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5127
						1CD1M04SG	AUX FW PUMP P4001 DISCH VALVE TR.C 1HV-5127
						1CD1M05LA	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 1HV-5106
						1CD1M05LB	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 1HV-5106
						1CD1M05SD	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 1HV-5106

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TABLE 2
UNITS 1 & 2

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PAGE 7 OF 12

BLDG	FIRE AREA/ZONE	ROOM	RACEWAY	TYPE	SIZE	CABLE(S)	DESCRIPTON/FUNCTION
						1CD1M05SE	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 1HV-5106
						1CD1M05SF	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 1HV-5106
						1CD1M05SG	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 1HV-5106
						1CD1M06LA	AUX FW-COND STO TK V4001 TO PUMP P4001 1HV-5113
						1CD1M06LB	AUX FW-COND STO TK V4001 TO PUMP P4001 1HV-5113
						1CD1M06SB	AUX FW-COND STO TK V4001 TO PUMP P4001 1HV-5113
						1CD1M06SC	AUX FW-COND STO TK V4001 TO PUMP P4001 1HV-5113
						1CD1M06SD	AUX FW-COND STO TK V4001 TO PUMP P4001 1HV-5113
						1CD1M06SE	AUX FW-COND STO TK V4001 TO PUMP P4001 1HV-5113
						1CH12010SA	AUX FDW PUMP HOUSE DSA DAMPER 1HV-12012
						1CWPAFTSB	AUX FDW TURB OVER SPEED TRIP RESET CKT
						1CWPAFTSE	AUX FDW TURB OVER SPEED TRIP RESET CKT
CB	2-CB-LA-I/93	A13	2DE443RS613	C	2"	2DD1I6NSJ	RHR LOOP 4 INLET ISO. VALVE 2HV-8702A
						2DD1I6NSK	RHR LOOP 4 INLET ISO. VALVE 2HV-8702A
CB	2-CB-LA-I/93	A13	2DE434RX091	C	2"	24CQPS4YC	CONTAINMENT PRESSURE PT-0934
						24CQPS4YY	RHR VALVE PRESS. INTERLOCK 2PT-0418
CB	2-CB-LB-X/200	A19	2AE341TTLA	T	6"X24"	2AA0203SG	CCW PUMP MOTOR 2-1203-P4-001-M01
						2AA0204SG	NSCW PUMP MOTOR 2-1202-P4-001-M01
						2AA0206SS	ESF CHILLER COMPRESSOR MOTOR 2-1592-C7-001-M01
						2AA0207SG	CCW PUMP MOTOR 2-1203-P4-003-M01
						2AA0208SG	NSCW PUMP MOTOR 2-1202-P4-003-M01

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TABLE 2
UNITS 1 & 2

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BLDG	FIRE AREA/ZONE	ROOM	RACEWAY	TYPE	SIZE	CABLE(S)	DESCRIPTION/FUNCTION
						2AA0208SP	NSCW PUMP MOTOR 2-1202-P4-003-M01
						2AA0209SG	RESIDUAL HEAT REMOVAL PUMP MOTOR 2-1205-P6-001-M01
						2AA0211SG	SPARE CCW PUMP MOTOR 2-1203-P4-005-M01
						2AA0211SK	SPARE CCW PUMP MOTOR 2-1203-P4-005-M01
						2AA0212SG	NSCW PUMP MOTOR 2-1202-P4-005-M01
						2AA0213SE	CVCS CHARGING PUMP MOTOR 2-1208-P6-002-M01
						2AA0217SH	AUX FEEDWATER PUMP MOTOR 2-1302-P4-003-M01
						2AA0219SG	4160 SWGR 2AA02 INCM BRKR FROM DIESEL GEN
						2AB1501SC	480V SWGR 2AB15 INCOM FDR BRKR
						2ABB22SA	NSCW VALVE 2HV-11600
						2ABB35SA	NSCW VALVE 2HV-11605
						2ABB36SA	NSCW VALVE 2HV-11606
						2ABD09SF	RHR PUMP 1 INLET VALVE 2HV-8812A
						2ABD09SG	RHR PUMP 1 INLET VALVE 2HV-8812A
						2ABD22SB	CHARGING PUMP ROOM COOLER MOTOR A 2-1555-A7-013-M01
						2ABD38SB	RHR PUMP 1 MINIFLOW VALVE 2FV-0610
						2ABD38SF	RHR PUMP 1 MINIFLOW VALVE 2FV-0610
						2ABD53SB	RHR PUMP ROOM COOLER MOTOR A 2-1555-A7-007-M01
						2ACQAMSACSB	TR-A MTR. DRIVEN AFWP AUTO START (AMSAC)
CB	2-CB-LB-X/200	A19	2AE341TSLA	T	6"X24"	2AA0203SH	CCW PUMP MOTOR 2-1203-P4-001-M01
						2AA0204SP	NSCW PUMP MOTOR 2-1202-P4-001-M01
						2AA0206SF	ESF CHILLER COMPRESSOR MOTOR 2-1592-C7-001-M01
						2AA0206SG	ESF CHILLER COMPRESSOR MOTOR 2-1592-C7-001-M01
						2AA0207SH	CCW PUMP MOTOR-2-1203-P4-003-M01
						2AA0212SP	NSCW PUMP MOTOR 2-1202-P4-005-M01
						2AA0215SD	ACCW PUMP MOTOR 2-1217-P4-001-M01
						2AA0215SF	ACCW PUMP MOTOR 2-1217-P4-001-M01

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TABLE 2
UNITS 1 & 2

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BLDG	FIRE AREA/ZONE	ROOM	RACEWAY	TYPE	SIZE	CABLE(S)	DESCRIPTON/FUNCTION
						2AA0216SE	TRAIN A SAFETY INJECTION PUMP 2-1204-P6-003
						2AB1505SL	NSCW COOLING TOWER FAN 2-1202-W4-001-M01
						2AB1506SK	NSCW COOLING TOWER FAN 2-1202-W4-001-M02
						2AB1508SK	NSCW COOLING TOWER FAN 2-1202-W4-001-M04
						2AB1513SL	NSCW COOLING TOWER FAN 2-1202-W4-001-M03
						2ABB05SR	NSCW TOWER FAN BYPASS VALVE 2HV-1668B
						2ABB09SR	NSCW COOLING TOWER A RETURN VALVE 2HV-1668A
						2ABB09SU	NSCW COOLING TOWER A RETURN VALVE 2HV-1668A
						2ABD08SB	CVCS RWST TO CHARGING PUMP VALVE 2LV-0112D
						2ABD08SF	CVCS RWST TO CHARGING PUMP VALVE 2LV-0112D
						2ABD08SG	CVCS RWST TO CHARGING PUMP VALVE 2LV-0112D
						2ABD09SK	RHR PUMP 1 INLET VALVE 2HV-8812A
						2ABD11SD	CVCS CHARGING PUMP MINIFLOW ISO. VALVE 2HV-8110
						2ABD11SE	CVCS CHARGING PUMP MINIFLOW ISO. VALVE 2HV-8110
						2ABD11SH	CVCS CHARGING PUMP MINIFLOW ISO. VALVE 2HV-8110
						2ABD38SH	RHR PUMP 1 MINIFLOW VALVE 2FV-0610
						2ABD40SF	CVCS CHARGING PUMP A DISCHARGE VALVE 2HV-8485A
						2ABD40SG	CVCS CHARGING PUMP A DISCHARGE VALVE 2HV-8485A
						2ABD43SF	CVCS CHARGING PUMP A SUCTION VALVE 2HV-8471A
						2ABD43SG	CVCS CHARGING PUMP A SUCTION VALVE 2HV-8471A
						2ABD47SC	CVCS BORIC ACID TRANSFER PUMP MOTOR 2-1208-P6-006-M01

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TABLE 2
UNITS 1 & 2

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BLDG	FIRE AREA/ZONE	ROOM	RACEWAY	TYPE	SIZE	CABLE(S)	DESCRIPTION/FUNCTION
						2ABD47SH	CVCS BORIC ACID TRANSFER PUMP MOTOR
						2ABD53SF	RHR PUMP ROOM COOLER MOTOR A 2-1555-A7-007-M01
						2ABD53SG	RHR PUMP ROOM COOLER MOTOR A 2-1555-A7-007-M01
						2ACBHG03ATF	DIESEL GENERATOR-DG2A
						2ACQSPASY	SI SIGNAL TO SEQUENCER
						2AR0455ASS	RCS PORV 2PV-0455A
						2AY2A08SA	120V AC FDR TO SEQUENCER 2-1821-U3-001 (TRAIN A)
						2AY2A14SA	DPU A POWER FEEDER
						2AY2A16SA	RPU A2 POWER FEEDER
CB	2-CB-LA-G/91	A16	2CE341RX297	C	1 1/2"	23CQPS3Y1	LT504,PT935 (ET AL)
CB	2-CB-LB-A/73	B80	2AE361RX198	C	3"	21R13135AXG	RE13135A RG 1.97 NEUTRON FLUX DETECTOR
						21R13135AXH	RE13135A RG 1.97 NEUTRON FLUX DETECTOR
						21R13135AXJ	RE13135A RG 1.97 NEUTRON FLUX DETECTOR
						21R13135AXK	RE13135A RG 1.97 NEUTRON FLUX DETECTOR
						21R13135AXL	RE13135A RG 1.97 NEUTRON FLUX DETECTOR
CTB	2-CTB/140A	*B03	2AE53ARX321	C	3/4"	21CQPS1AXV	Pressurizer Level 2LT-0459
CTB	2-CTB/140A	*B03	2AE53ARX321	C	3/4"	21CQPS1AXW	Pressurizer Level 2LT-0459
CTB	2-CTB/140C	*B02	2BE532RX065	C	3/4"	22CQPS2AXC	RCS Wide Range Pressure 2PT-0403
CTB	2-CTB/140A	*B03	2AE53AKXJ95	JB	N/A	21CQPS1AXS 21CQPS1AXV	PRESSURIZER PRESSURE PT-0455 PRESSURIZER LEVEL 2LT-0459

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TABLE 2
UNITS 1 & 2

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BLDG	FIRE AREA/ZONE	ROOM	RACEWAY	TYPE	SIZE	CABLE(S)	DESCRIPTON/FUNCTION
						2AR0442AXF	RCS HEAD VENT LETDOWN VALVE 2HV-0442A
						2AR0442AXG	RCS HEAD VENT LETDOWN VALVE 2HV-0442A
CTB	2-CTB/140A	*B03	2ARJB0056	JB	N/A	21CQPS1AXV 21CQPS1AXW	PRESSURIZER LEVEL 2LT-0459 PRESSURIZER LEVEL 2LT-0459
CTB	2-CTB/140A	*B03	2BE53BKXJ01	JB	N/A	22CQPS2AXB	RCS WIDE RANGE PRESSURE 2PT-0403
CTB	2-CTB/140C	*B02	2BRJB0050	JB	N/A	22CQPS2AXB 22CQPS2AXC	RCS WIDE RANGE PRESSURE 2PT-0403 RCS WIDE RANGE PRESSURE 2PT-0403
CTB	2-CTB/140C	*B02	2BE52AKXJ98	JB	N/A	22R13135BXA 22R13135BXB	RE13135B RG 1.97 NEUTRON FLUX DETECTOR RE13135B RG 1.97 NEUTRON FLUX DETECTOR
CTB	2-CTB/140C	*B02	2-PT-0403	I	N/A	REFER TO CABLE OR CONDUIT	
CTB	2-CTB/140A	*B03	2-LT-0459	I	N/A	REFER TO CABLE OR CONDUIT	
AUX	2-AB-LC-B/17	B109 C039	2CE442RX278	C	3"	23CQPS3XY 23CQPS3YY 23RV288XA	CONNTAINMENT PRESSURE PT-0935 RHR VALVE PRESS. INTERLOCK 2PT-0408 NSCW PUMPS DISCHARGE TRAIN A PRESSURE PT 11741
TUN	2-CB-LB-D/144	2T4B	2CE8C3KPH01	JB	N/A	2CD1M05LA 2CD1M05LB 2CD1M05SD 2CD1M05SE 2CD1M05SF 2CD1M05SG	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 2HV-5106 AUX. FW TURBINE DRIVEN STEAM INLET VALVE 2HV-5106 AUX. FW TURBINE DRIVEN STEAM INLET VALVE 2HV-5106 AUX. FW TURBINE DRIVEN STEAM INLET VALVE 2HV-5106 AUX. FW TURBINE DRIVEN STEAM INLET VALVE 2HV-5106

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TABLE 2
UNITS 1 & 2

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BLDG	FIRE AREA/ZONE	ROOM	RACEWAY	TYPE	SIZE	CABLE(S)	DESCRIPTON/FUNCTION
TUN	2-CB-LB-D/144	2T4B	2CE8C3KPH02	JB	N/A	2CD1M05LA	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 2HV-5106
						2CD1M05LB	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 2HV-5106
						2CD1M05SD	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 2HV-5106
						2CD1M05SE	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 2HV-5106
						2CD1M05SF	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 2HV-5106
						2CD1M05SG	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 2HV-5106
TUN	2-CB-LB-D/144	2T4B	2CE8C3KPH03	JB	N/A	2CD1M05LA	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 2HV-5106
						2CD1M05LB	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 2HV-5106
						2CD1M05SD	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 2HV-5106
						2CD1M05SE	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 2HV-5106
						2CD1M05SF	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 2HV-5106
						2CD1M05SG	AUX. FW TURBINE DRIVEN STEAM INLET VALVE 2HV-5106

LEGEND:

CB = Control Bldg
 CTB = Containment Bldg
 AUX = Auxiliary Bldg
 Tun = Tunnel
 C = Conduit
 JB = Junction Box
 I = Instrument
 T = Tray
 * = Raceways wrapped to support Radiant Energy Shield Criteria

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TABLE 3
UNITS 1 & 2

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BLDG	FIRE AREA/ZONE	ROOM	RACEWAY	TYPE	SIZE
CB	1-CB-LC-B/80	B50	1DE332RX806	C	3"
CB	1-CB-LC-B/138	B42	1BE311RX217	C	1"
CB	1-CB-LC-B/138	B42	1BE311RS184	C	2"
CB	1-CB-LC-B/138	B42	1BE311RR314	C	1"
CB	1-CB-LC-B/138	B42	1BE311RS130	C	1 1/2"
CB	1-CB-LC-B/80	B50	1DE7C3RX043	C	1"
CB	1-CB-LC-B/80	B50	1DE311RX143	C	4"
CB	1-CB-LC-B/80	B50	1DE311RS074	C	4"
CB	1-CB-LC-B/80	B50	1DE31DRS113	C	2"
CB	1-CB-LC-B/80	B50	1DE311RS073	C	4"
CB	1-CB-LC-B/80	B50	1DE31DRL037	C	2"
CB	1-CB-LC-B/80	B50	1DE311RX247	C	1"
CB	2-CB-LB-A/73	B80	2AE361RX199	C	3"
CB	2-CB-LB-A/73	B80	2AE361RX200	C	3"
CB	2-CB-LA-N/85	A18	2AE341RX114	C	3"
CB	2-CB-LA-N/85	A18	2AE341RS115	C	3"
CB	2-CB-LA-N/85	A18	2AE341RU383	C	3/4"
CB	2-CB-LA-G/91	A16	2BE341RY281	C	1"
CB	2-CB-LA-G/91	A16	2BE341RY282	C	1"
CB	2-CB-LA-G/91	A16	2CE341RQ296	C	2"

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TABLE 3
UNITS 1 & 2

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BLDG	FIRE AREA/ZONE	ROOM	RACEWAY	TYPE	SIZE
CB	2-CB-LA-G/91	A16	2CE341RX298	C	4"
CB	2-CB-LA-G/91	A16	2BE341RY279	C	2"
CB	2-CB-LB-A/73	B06	2CE8C3RX052	C	3"
TUN	2-CB-LB-D/144	2T4B	2CE8C3RX052	C	3"
TUN	2-CB-LB-D/144	2T4B	2CE8C3RX805	C	2"
TURB	N/A	21C1	2AE16ARS001	C	3"
TURB	N/A	21C1	21E16ARX001	C	2"

OTHERS

AUX	1-AB-LD-A/11B	117	AN2121A, 2365G, 2365D,	HVAC DUCT, UNIT 1
CB	1-CB-L3-H/135	330	CN-2336, 2537A	HVAC DUCT, UNIT 1
CB	2-CB-LA-N/85	A18	N/A	HVAC DUCT & S. STEEL added in accordance with E-FCRB-22940

LEGEND:

CB = Control Bldg.
 Aux = Auxiliary Bldg.
 Tun = Tunnel
 C = Conduit
 TURB = Turbine Bldg.
 E-FCRB = Electrical Field Change Request

Note: No CMEB 9.5-1 cables in Table 3. Therefore, no cable listing or description is provided.

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