



South Carolina Electric & Gas Company
P.O. Box 88
Jenkinsville, SC 29085
(803) 345-4040

John L. Skolds
Vice President
Nuclear Operations

JUL 20 1992

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

Gentlemen:

Subject: VIRGIL C. SUMMER NUCLEAR STATION
DOCKET NO. 50/395
OPERATING LICENSE NO. NPF-12
RESPONSE TO NRC BULLETIN 92-01

South Carolina Electric & Gas Company submits the attached Fire Barrier Report pursuant to NRC Bulletin 92-01, Failure of Thermo-Lag 330 Fire Barrier System to Maintain Cabling in Wide Cable Trays and Small Conduit Free from Fire Damage, Requested Action #3. This report satisfies the requirements of Technical Specifications 6.9.2 identifying fire barriers which are inoperable for greater than seven days.

I declare that the statements and matters set forth herein are true and correct to the best of my knowledge, information, and belief.

Should you have any questions, please call at your convenience.

Very truly yours,

John L. Skolds

MBR:lcd
Attachment

c: O. W. Dixon
R. R. Mahan
R. J. White
S. D. Ebnetter
G. F. Wunder
General Managers
NRC Resident Inspector
J. B. Knotts Jr.
NUMARC
RTS (IEB 920001)
File (815.02)

24001
NUCLEAR EXCELLENCE - A SUMMER TRADITION!

9207240178 920720
PDR ADOCK 05000395
G PDR

JEH9 1/1

SOUTH CAROLINA ELECTRIC & GAS COMPANY
FIRE BARRIER REPORT PER NRC BULLETIN 92-01
AND TECHNICAL SPECIFICATIONS 6.9.2

Thermo-Lag 330 fire barrier material is used in five locations at Virgil C. Summer Nuclear Station. Each installation is designed to provide 1-hour fire barriers to meet the separation requirements of 10 CFR 50, Appendix R. A review of these installations found two barriers which meet the conditions identified in the bulletin requiring compensatory actions:

Thermo-Lag Panels are used to protect Cable Tray 3088. This cable tray is eighteen inches wide and supplies various A-Train loads. Table B (attached) identifies the affected loads.

Thermo-Lag preshaped conduit sections are used to protect a three inch conduit which supplies DC power to the Main Control Board.

In addition, compensatory actions were initiated for two other barriers:

Thermo-Lag Panels and a steel frame is used to enclose two conduits which contained Nuclear Instrument signal cables. This installation is identified by Thermal Science, Inc. as a Self Supported Structure. Due to its size and similarities in construction this barrier may be susceptible to the same type of failures as the large cable trays.

Thermo-Lag Panels and Flexi-Blanket is used to protect Unistrut and threaded rods which suspend an M-Board fire barrier over the "A" Service Water Booster Pump. This is an upgrade to a preexisting fire barrier previously reviewed by the NRC.

Thermo-Lag preshaped conduit sections are used to protect two conduits which provide "A" Train power to the "C" Chiller. This barrier is installed to maintain swing component capability. Initially, compensatory actions were established for this fire barrier. However, based on the definition of "small diameter conduits" received from the NRC and NUMARC meeting of July 7, 1992, compensatory actions have been suspended for this area.

The location, type and purpose of all Thermo-Lag installations is identified on Table A (attached).

Upon receipt of this bulletin a Non Conformance Notice (NCN) and Removal and Restoration Sheet (R&R) were initiated to identify the condition of the Thermo-Lag fire barriers. A roving fire watch was established on June 25, 1992 to tour each room containing a Thermo-Lag fire barrier. Station procedures require an inspection of each room on an hourly basis, provided the fire detection capability exists. In the event of a loss of fire detection capability, a continuous fire watch will be established in each area.

South Carolina Electric & Gas Company has established compensatory actions as required by NRC Bulletin 92-01. We will continue to work with Thermal Science, Inc., and the industry to develop a course of action to ensure the fire barriers are capable of performing their design function. This course of action may include one or more of the following:

1. Review available test documentation to reaffirm acceptability of existing fire barriers. This may require performance of site specific fire endurance tests.
2. Receive and review adequate test documentation to upgrade the present installations.
3. Replacement of Thermo-Lag fire barriers with a tested, approved fire barrier system.

TABLE A
 THERMO-LAG FIRE BARRIERS

FIRE BARRIER ID #	TYPE	SIZE	LOCATION	NRCB 92-01 APPLICABILITY	FUNCTION
24A-TW	SSS *	8 X 13"	CB 36-03	No	Separation of NI-31 and NI-32 signal cables from NI-33 power cable.
58-TW	Cable Tray	18"	IB 12-02S IB 36-02	Yes	Protection of Cable Tray 3088, (see table B for components supplied)
59-TW	Conduit	4"	IB 26-01	No	Protection of "C" Chiller, A-Train power supply.
74-TW	Conduit	3"	CB 12-04	Yes	Protection of DC power to Main Control Board.
76-TW	Panels & Flexi-Blanket	N/A	IB 12-02S	No	Protection of supports for M-Board fire barrier over "A" Service Water Booster Pump.

SSS*: Self Supported Structure made from prefabricated panels.
 CB: Control Building
 IB: Intermediate Building

TABLE B

Components supplied through Cable Tray 3088:

Equipment Number	Name	Safety Class
XFN0038A	Battery & Charging Room Air Handling Unit "A" Supply Fan	(NNS)
XFN0039A	Battery Room Exhaust Fan "A"	(NNS)
XES2001A	Speed Switch, Component Cooling Pump "A"	(SR)
XES2001C	Speed Switch, Component Cooling Pump "C"	(SR)
XPN7200A	Control Room Evacuation Panel	(SR)
XSW0001	Reactor Trip Switchgear	(SR)
XCA0001A	S.S. Power Cabinet 1A	(NNS)
XCX5201	Diesel Generator "A" Control Cubicle	(SR)
XPN5504	Diesel Generator "B" Relay & Terminal Panel	(SR)
YES0006	Diesel Generator "A" Starter DC Fuel Oil Pump	(SR)
XEX4201	Diesel Generator "A" Exciter Regulator Cubicle	(SR)
XPN5248	Relay & Isolation Fuse Panel	(SR)
XBC1A	DC Distribution Bus 1A Battery Charger	(SR)
XBC1A-1B	DC Distribution Bus 1A-1B Backup Battery Charger	(SR)
XPN5259	Isolation Fuse Panel	(SR)
XSW1DA	7.2 KV Switchgear, Bus 1DA	(SR)
XSW1DA1	ESF 480 Volt Unit Substation, Bus 1DA1	(SR)
XSW1DA2	ESF 480 Volt Unit Substation, Bus 1DA2	(SR)
XPN6011	Reactor Protection Under Frequency & Under Voltage Panel 1	(SR)
XPN7106	Main Control Board Termination Cabinet	(SR)