DUKE POWER COMPANY
P.O. BOX 33189
CHARLOTTE, N.C. 28242

HAL B. TUCKER
VICE PRESIDENT
NUCLEAR PRODUCTION

TELEPHONE
(704) 373-4531

June 15, 1983

83 JUN 20 AM 10:00
USNRC REGION II
ATLANTA, GEORGIA

Mr. James P. O'Reilly, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30303

Re: Catawba Nuclear Station
Unit 1
Docket No. 50-413

Dear Mr. O'Reilly:

Pursuant to 10 CFR 50.55e, please find attached a revised response to Significant Deficiency Report SD 413/82-10.

Very truly yours,

Hal B. Tucker

Hal B. Tucker

RWO/php

Attachment (1)

cc: Director
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

INPO Records Center
Suite 1500
1100 Circle 75 Parkway
Atlanta, Georgia 30339

Palmetto Alliance
2135½ Devine Street
Columbia, South Carolina 29205

Mr. P. K. Van Doorn
NRC Resident Inspector
Catawba Nuclear Station

Mr. Robert Guild, Esq.
Attorney-at-Law
P.O. Box 12097
Charleston, South Carolina 29412

OFFICIAL COPY

8306270118 830615
PDR ADOCK 05000413
S PDR

IE 27
1/1

JPO/RWO
June 15, 1983

Duke Power Company
Catawba Nuclear Station

Report Number: SD 413/82-10, Rev. 1

Report Date: June 15, 1983

Facility: Catawba Nuclear Station, Unit 1

Identification of Deficiency: Non-Class 1E communication, fire detection and lighting cables were attached to the side rails of essential cable trays.

Initial Report: On March 29, 1982, Mr. A. Ignatonis of the NRC, Region II, Atlanta, Georgia, was notified of this deficiency by Mr. W. O. Henry and Mr. D. E. Roberts of Duke Power Company, Charlotte, North Carolina 28242.

Suppliers and/or Components: The Non-Class 1E communications, fire detection and lighting cables are comprised of the following type constructions:

1) Pairs of #22 AWG insulated with tefzel as furnished by Okonite and cross-linked polyethylene as furnished by the Rockbestos Company enclosed in a 25 mil thick welded seam corrugated aluminum armor designated as PAA cables.

2) Shielded pairs of #16 AWG insulated with flame retardant cross-linked polyethylene as furnished by Brand-Rex and flame retardant ethylene propylene rubber as furnished by the Okonite Company, Anaconda Ericsson and Eaton Corporation enclosed in a 25 mil thick galvanized steel interlocked armor designated as SPX cables.

3) Singles insulated with cross-linked polyethylene as manufactured by the Okonite Company enclosed in a 25 mil thick welded seam corrugated aluminum armor designated as ALS cables.

Description of Deficiency: Field run non-Class 1E cables used in communication, fire detection and lighting applications were attached to the side rails of essential cable trays and/or installed in the proximity of Class 1E cables/ cable trays such that the minimum separation distances as defined in the Catawba FSAR were not maintained. This deficiency was noted in the plant construction phase during a routine inspection.

Corrective Action: Based on the limited power available on these circuits and/or the cable construction and associated fire test results that have been provided by the cable manufacturers, the cable installation described above does not degrade Class 1E circuits below an acceptable level and is therefore acceptable as installed. The following information is provided in support of this position:

1. All of the cables in these applications have been qualified in accordance with the IEEE 383-1974 flame test.

2. Class 1E circuits are installed in interlocked armor cables which have been tested to demonstrate that the circuits in one cable are unaffected by a fault in an adjacent cable. Refer to the response of question 430.28 in the FSAR.

3. These circuits are fed from low voltage systems as listed below, thus minimizing the potential for any adverse effects on Class 1E circuits.

   a) Lighting circuits are either 250 volts DC or 120 volts AC.

   b) Fire detection circuits are fed from the 120 volt AC auxiliary control power system inverters.

   c) Communication circuits operate at 98 or 120 volts AC or 48 volts DC and, in either case, are powered from a dedicated power supply.

4. Catawba FSAR Section 8.3.1.4.5.2 has been revised to exempt these cables from the separation criteria. However, all cables installed after June 1, 1982 were restricted to being attached to non-Class 1E cable trays only.