SOUTH CAROLINA ELECTRIC & GAS COMPANY

COLUMBIA, SOUTH CAROLINA 29218

T. C. NICHOLS, JR. VICE PRESIDENT AND GROUP EXECUTIVE NUCLEAR OPERATIONS

May 22, 1981



Mr. James P. O'Reilly, Director U. S. Nuclear Regulatory Commission Region II, Suite 3100 101 Marietta Street, N. W. Atlanta, Georgia 30303

> Subject: Virgil C. Summer Nuclear Station Docket No. 50/395 Significant Deficiency Nuclear Engineering File 3.1051

Dear Mr. O'Reilly:

This letter is confirmation of a telephone conversation with Mr. Virgil Brownleee of NRC Region II and Mr. Tom Brewer. This item was first reported by Mr. J. A. Wactor to Bob McFarland on November 26, 1980 and followed by interim letters dated December 23, 1980 and March 6, 1981. The item was earlier reported as a potential substantial safety hazard per 10CFR21 under the topic "Defective 480 Volt Switchgear Trip Units"; however, it has now been determined to be reportable as a significant deficiency per 10CFR50.55(e).

The item involved a 480 volt circuit breaker "Power Shield" trip unit that tested good with the 504 test set, but would not hold in the service breaker when the motor was started. Upon return to the factory initial tests with the 504 test set judged this unit to test good, however, detailed inspection revealed broken solder connections on both the Longtime and Shortime boards. These broken connections were making intermittent contact which could have caused them to open during service. The factory indicated that this unit had appeared to be subjected to some severe mechanical shock or possibly had been dropped. The connections were repaired and the unit tested good at factory. Then it was shipped to the Virgil C. Summer Nuclear Station where it again tested good.

Reviewing current and past data on the 504 tester and mult-amp tester showed that there are no problems with the switchgear testing at the V. C. Summer Nuclear Station.

The significant deficiency was declared because the safety related fuel handling exhaust fan failed to start when it was required to start. For more details of the significant deficiency see attached lOCFR50.55(e) - Significant Deficiency.

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This is considered a final report on the matter.

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T. C. Nichols, Jr.

TB:TCN:glb

Attachment

cc: V. C. Summer w/o Att. G. H. Fischer w/o Att. T. C. Nichols, Jr. w/o Att. O. W. Dixon, Jr. C. A. Price D. A. Nauman W. A. Williams, Jr. R. B. Clary A. R. Koon A. A. Smith H. N. Cyrus J. B. Knotts, Jr. J. L. Skolds B. A. Bursey Document Management Branch I&E (Washington) ISEG E. W. Rhoads W. D. Wagner J. Ruoff NPCF H. E. Yocom File

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10CFR50.55(e) - SIGNIFICANT DEFICIENCY

1. Identification of Nonconformance

In switchgear XSW-LDA2-5D the fuel handling exhaust fan failed to start when it was called on. The power shield in the ITE breaker was the problem. For more details reference interim letter March 6, 1981.

2. Number and Location of Nonconformance

Switchgear XSW-1DA2 - cubicle 5D. Switchgear located in Intermediate Building 463' level.

3. Significant Deficiency Created and Evaluation

The switchgear testing program has been found to be good. The significant deficiency concerns loss of one (1) fuel handling exhaust fan that is safety related. The fuel handling building exhaust fan draws exhaust air through the fuel handling building charcoal filter plenums and directs it to the main exhaust fans. All fuel handling building exhaust air is passed through HEPA and charcoal filters before release through the plant vent to the atmosphere. The function of the fan is to maintain a negative pressure in the fuel handling building to prevent the escape of unfiltered air.

Technical Specification 3.9.11 says two (2) independent spent fuel pool ventilation systems shall be operable. Applicability: when irradiated fuel is in the spent fuel pool.

4. Corrective Action

The defective power shield (#32385) was removed and a new power shield (#44282) was installed. The breaker performed as it should. The failed power shield was sent to the factory for tests. The power shield 32385 was fixed at factory and it tested good. Power shield is now in the ware-house as a spare part. No general corrective action has been deemed necessary since there is no direct knowledge of how the damage occurred.