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July 23, 1993
Refer to: RC-93-0197

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

Gentlemen:

Subject: VIRGIL C. SUMMER NUCLEAR STATION
DOCKET NO. 50/395
OPERATING LICENSE NO. NPF-12
RESPONSE TO NOTICE OF VIOLATION
NRC INSPECTION REPORT 93-09 (IE 930901)

Attached is the South Carolina Electric & Gas Company (SCE&G) response to Violation 93-09-01 delineated in NRC Inspection Report No. 50/395/93-09.

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

Very truly yours,

John L. Skolds

RJB:lcd
Attachment

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NUCLEAR EXCELLENCE - A SUMMER TRADITION!

RESPONSE TO NOTICE OF VIOLATION 93-09-01

I. RESTATEMENT OF NRC VIOLATION

TS 3.9.4 requires, in part, that during refueling operations, each reactor building penetration providing direct access from the reactor building atmosphere to the outside atmosphere be either:
(1) Closed by an isolation valve, blind flange, or manual valve, or
(2) Be capable of being closed by an operable automatic Reactor Building Purge and Exhaust isolation valve.

Contrary to the above, on March 20, 1993, during refueling operations, reactor building (RB) penetration NOZZ 600-12 was inadequate in that there was free communication between the RB atmosphere and the outside atmosphere through this penetration. This free communication was discernible by daylight shining through the penetration and by a steady stream of air blowing out from the penetration.

II. SCE&G POSITION ON THE VIOLATION

SCE&G agrees with the violation as stated above.

III. REASON FOR THE VIOLATION

SCE&G has been unable to determine the cause and time that this breach occurred. An initial inspection by Quality Control (QC) during the fabrication of the temporary barriers insures a leak tight seal prior to installation.

During the investigation of this event, a program weakness was identified.

The configuration of the temporary barrier is similar to a fire barrier. Kaowool and foam material are used to seal around the cables which are passed through a metal sleeve. The metal sleeve is flanged on one end to facilitate bolting of the assembly to the spare penetration flange.

In preparing the temporary barrier, the metal sleeve is staged immediately adjacent to the spare penetration. The cables are passed through the open spare penetration and the sleeve. Kaowool is used to separate the cables and foam material is then used as the sealant. After a minimum of 24 hours cure time, the assembly is inserted into the penetration and bolted in place.

Quality Systems Procedure (QSP) 402, "Inspection of the Installation and Repair of CT-18/Dow Corning 3-548 RTV Silicone Foam Penetration Seal," defines the method for inspection and documentation for foam

penetration seals. QSP-402 was utilized during the assembly of the temporary barrier up to and including the verification of the minimum 24 hour cure time. QSP-402 does not require a post installation inspection of temporary penetration barriers after the assembly is inserted into the penetration. This is identified as a program weakness.

IV. CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

On notification that the temporary penetration barrier was not completely sealed, the action statement of Technical Specifications 3.9.4, "Refueling Operations - Reactor Building Penetrations," was entered and core alterations were immediately suspended. A nonconformance notice (NCN) was initiated for an evaluation of the condition and repair disposition. The temporary penetration barrier was repaired by applying RTV sealant at the sealing surface of the foam material and the insert sleeve. Following an inspection of the repair by QC, core alterations were resumed.

V. CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATIONS

QSP-402 will be revised to require a visual post installation inspection of temporary penetration barriers to verify adequate seal.

VI. DATE OF FULL COMPLIANCE

December 1, 1993