SOUTH CAROLINA ELECTRIC & GAS COMPANY
POST OFFICE 764
COLUMBIA, SOUTH CAROLINA 29218

O. W. DIXON, JR.
VICE PRESIDENT
NUCLEAR OPERATIONS

January 25, 1983

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
Operating License No. NPF-12
Thirty Day Written Report
LER 82-066

Dear Mr. O'Reilly:

Please find attached Licensee Event Report #82-066 for Virgil C. Summer Nuclear Station. This Thirty Day Report is required by Technical Specification 6.9.1.13.(b) as a result of entry into the Action Statement of Technical Specification 3.4.6.1, "Leakage Detection Systems," on December 26, 1982.

Should there be any questions, please call us at your convenience.

Very truly yours,

O. W. Dixon, Jr.

CJM:OWD:dwf
Attachment

cc: V. C. Summer
T. C. Nichols, Jr.
E. C. Roberts
O. W. Dixon, Jr.
H. N. Cyrus
H. T. Babb
D. A. Nauman
M. B. Whitaker, Jr.
W. A. Williams, Jr.
O. S. Bradham
R. B. Clary
M. N. Browne
A. R. Koon
G. D. Moffatt
Site QA
C. L. Ligon (NSRC)
G. J. Braddick
J. L. Skolds
J. B. Knotts, Jr.
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DETAILED DESCRIPTION OF EVENT

On December 26, 1982, at 0530 hours, with the Plant in Mode 1, the Reactor Building Sump Leakage Detection System was declared inoperable when the high level alarm remained in the alarm state. The system is required to be operable in Modes 1 through 4 per Technical Specification 3.4.6.1.b. Normal operation continued with the inoperable leakage detection system, since the containment gaseous and particulate radiation monitoring systems were operable until December 28, 1982, when the Plant experienced a reactor trip.

On December 29, 1982, an interpretation of Technical Specification 3.4.6.1.b was agreed upon with NRC Region II, in that a one gallon per minute leak rate can be detected by probes from either the leak detection or reactor building sumps. Reactor criticality was re-established with the alternate method of leakage detection via the reactor building sump.

PROBABLE CONSEQUENCES

There were no adverse consequences from this event. During the time period in which the leakage detection system was inoperable, the containment gaseous and particulate radiation monitoring system would have detected any increase in activity indicative of excess leakage.

CAUSE(S) OF THE OCCURRENCE

The cause of the occurrence is attributed to the failure of the capacitance level detection system.

IMMEDIATE CORRECTIVE ACTIONS TAKEN

Investigation by maintenance personnel into the cause of the high alarm identified the failure of both of the level switches for the leak detection system. The capacitance probes and associated electronics were replaced on December 28, 1982. The sensitivity of the system was found to be affected by the close proximity of the probe metal support brackets during system calibration. An engineering analysis indicated that the supports were unnecessary and were subsequently removed on December 29, 1982. System repairs and the satisfactory performance of a calibration with the appropriate surveillance test procedure were completed on January 22, 1983, at 0600 hours. The Reactor Building Sump Leakage Detection System was returned to service at that time as the primary means of detecting a one gallon per minute leak rate.

ACTION TAKEN TO PREVENT RECURRENCE

The Licensee plans no additional action in regards to this event unless warranted by similar occurrences in the future.