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

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

June 14, 1982

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

Subject: Virgil C. Summer Nuclear Station
Docket No. 50/395
Reportable Substantial Safety Hazard
Reactor Protection Underfrequency
Relay Failure
NE File: 3.1051

Dear Mr. O'Reilly:

On May 26, 1982, a substantial safety hazard as defined by 10CFR21 was reported to Mr. John Rogge at the NRC Region II office. The item involves the failure of the reactor protection underfrequency relays. Details are given on the attachment. This item is being reported under our 10CFR50.55(e) procedure.

This letter serves as a final report. If you have any questions, please let us know.

Very truly yours,

O. W. Dixon, Jr.

DH:OWD:tdh

Attachment

cc: V. C. Summer
T. C. Nichols, Jr.
G. H. Fischer
H. N. Cyrus
H. T. Babb
D. A. Nauman
M. B. Whitaker, Jr.
W. A. Williams, Jr.
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R. B. Clary
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I&E (Washington)
Document Management Branch
*(55e,21, LER only)
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File

IE 27

10CFR21 - SUBSTANTIAL SAFETY HAZARD

1. Name and Address of Reporting Individual

Danny Hicks
South Carolina Electric and Gas Company
P. O. Box 764
Columbia, SC 29218

2. Identification of Basic Component

Reactor Protection Underfrequency Relays

3. Identification of Firm Supplying Component

General Electric

4. Nature of Defect, Substantial Safety Hazard Created, and Evaluation

During recent field testing, it was discovered that the reactor protection underfrequency relay's output contacts chattered. The cause of the contact's chatter could not be established. When this condition exists, the output contacts will not stay closed long enough to allow a timing circuit to operate. Therefore, the underfrequency relays would not initiate a reactor trip, as designed.

5. Date Information of Defect Was Obtained - April 5, 1982

6. Number and Location of Defect

Reactor Protection Cabinet - 2 underfrequency relays

Equipment No. XPN6011-81-1A & XPN6013-81-C

7. Corrective Action

The three reactor protection underfrequency relays will be replaced with a new and updated series of relays which will be verified to operate properly in this application. The manufacturer has been advised of the relay problem for pursuit of generic corrective action, if deemed a design problem.

8. Advice to Purchasers or Licensees

Possibly check for similar occurrences in similar applications.