

USNRC REGION II  
SOUTH CAROLINA ELECTRIC & GAS COMPANY  
ATLANTA, GEORGIA  
POST OFFICE 764  
COLUMBIA, SOUTH CAROLINA 29218

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

83 SEP 6 P2:47

September 2, 1983

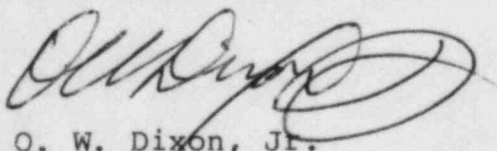
Mr. James P. O'Reilly  
Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II, Suite 2900  
101 Marietta Street, N.W.  
Atlanta, Georgia 30303

Subject: Virgil C. Summer Nuclear Station  
Docket No. 50/395/  
Operating License No. NPF-12  
Substantial Safety Hazard  
7.2 KV Switchgear  
NE File: 3.1051

Dear Mr. O'Reilly:

South Carolina Electric and Gas Company (SCE&G) has determined that a substantial safety hazard as defined by 10 CFR Part 21 existed at the Virgil C. Summer Nuclear Station. The hazard involved the potential failure of the 7.2 KV breakers on the essential bus trains. Details are given in the attachment to this letter. This is considered a final report on this matter. If you have any questions, please advise.

Very truly yours,

  
O. W. Dixon, Jr.

DOH:OWD/lkh

Attachment

cc: V. C. Summer  
E. H. Crews, Jr.  
T. C. Nichols, Jr.,/  
O. W. Dixon, Jr.  
E. C. Roberts  
H. N. Cyrus  
Group/General Managers  
O. S. Bradham  
R. B. Clary  
C. A. Price  
A. R. Koon  
General Electric

D. A. Lavigne  
C. L. Ligon (NSRC)  
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10CFR21 - SUBSTANTIAL SAFETY HAZARD

1. Name and Address of Reporting Individual

Danny Hicks, South Carolina Electric and Gas

P. O. Box 764

Columbia, S.C. 29218

2. Identification of Basic Component

7.2 KV Magne-Blast Circuit Breaker Type AM-7.2-500-5 and

AM-7.2-500-6

3. Identification of Firm Supplying Component

General Electric Company

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

While performing maintenance on a 7.2 KV breaker on an essential  
bus train, wiring terminated on the '52' auxiliary switch was found  
with broken strands. After examining the remaining 7.2KV essential  
bus train breakers, broken strands on the '52' auxiliary switch were  
found to be a common problem. An open circuit or short circuit  
created from a complete separation of the wire could prevent the  
7.2KV breaker from opening or closing as required, creating a  
substantial safety hazard. No completely broken wires were found,  
and no misoperation of any breakers has been caused by this  
problem.

5. Date Information of Defect Was Obtained - April 18, 1983

6. Number and Location of Defect

7.2 KV Switchgear - Bus Train 1DA

Bus Train 1DB

Bus Train 1EA

Bus Train 1EB

7. Corrective Action

Since the contributing factor for the broken strands was excessive bending of the wire right at the barrel of the lug, the wires terminated on the '52" auxiliary switch with broken strands were relugged and the stress relieved to prevent future broken strands. If enough slack in the cable to relieve the stress could not be obtained, the wire was replaced. Maintenance procedures are to be changed to specifically inspect for this condition during normal maintenance of the breakers.

8. Advice to Purchasers or Licensees

It would be advisable to inspect for broken strands of wire on the terminations to the '52' auxiliary switch in the 7.2 KV switchgear.