

SOUTH CAROLINA ELECTRIC & GAS COMPANY

POST OFFICE 764

COLUMBIA, SOUTH CAROLINA 29218

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

October 21, 1982

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 82-007

82 OCT 26 A 9:43  
US NRC REGION II  
ATLANTA, GEORGIA

Dear Mr. O'Reilly:

Please find attached Licensee Event Report #82-007 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 Action Statement A of Technical Specification 3.7.9.2(d), "Spray and/or Sprinkler Systems," on September 25, 1982.

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

Very truly yours,



O. W. Dixon, Jr.

ARK:OWD:dwf  
Attachment

cc: See Page Two

8210290335 821021  
PDR ADOCK 05000395  
S PDR

OFFICIAL COPY

IE 22

Mr. James P. O'Reilly  
LER 82-007  
Page Two  
October 21, 1982

cc: V.C. Summer  
T.C. Nichols, Jr.  
G.H. Fischer  
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  
H. Radin  
Site QA  
C.L. Ligon (NSRC)  
G.J. Braddick  
J.L. Skolds  
J.B. Knotts, Jr.  
B.A. Burse  
I&E (Washington)  
Document Management Branch  
NPCF  
File

Mr. James P. O'Reilly  
LER No. 82-007  
Page Three  
October 21, 1982

#### DETAILED DESCRIPTION OF EVENT

On September 25, 1982, the routine Surveillance Test Procedure for the Diesel Generator Building Preaction Sprinkler System was being conducted to comply with Technical Specification 3.7.9.2.d. During the performance of this test, the system heat detectors failed to actuate the sprinkler valve. The system was repaired and restored to service.

On September 26, 1982, while investigating the probable causes of the previous day's event, the Diesel Generator Building Sprinkler System automatically actuated. Subsequent inspection of the Diesel Generator Building disclosed that no fire or fire conditions existed.

#### PROBABLE CONSEQUENCES

The failure of the heat detectors to operate the Diesel Generator Building Preaction Sprinkler System resulted in an inoperable automatic fire protection system. Had a fire occurred in this area, it would have been necessary to manually actuate the sprinkler valve.

#### CAUSE OF THE OCCURRENCE

Trouble shooting the control panel associated with the heat detectors and the sprinkler valve revealed that the circuit board was corroded and inoperative on the 25th. It appeared that rainwater had entered the panel and actuated the valve on the 26th. A penetration in the Turbine Building exterior wall (not a fire rated barrier) was not provided with a weather seal, thus allowing rainwater to enter. The rainwater ran down the wall and into the system control panel. It is the licensee's opinion that this entry path for water was the cause of the corrosion and failure of the circuit board as well as the subsequent activation.

Mr. James P. O'Reilly  
LER No. 82-007  
Page Four  
October 21, 1982

IMMEDIATE CORRECTIVE ACTION

Upon failure of the heat detectors to actuate the sprinkler valve, immediate steps were taken to comply with the Action Statement of Technical Specification 3.7.9.2.d. This involved posting continuous fire watches and backup fire suppression equipment in the affected areas of the Diesel Generator Building. The fire protection system was promptly repaired and retested.

ACTION TAKEN TO PREVENT RECURRENCE

To prevent recurrence, the penetration in the Turbine Building wall will be provided with a weather seal. A temporary cover has been installed over the sprinkler system control panel and the wall penetration.