NRC FORM 366
(12-81)

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

APPROVED BY OMB
3150-0011
EXPIRES 4-30-82

CONTROL BLOCK: ☐☐☐☐☐☐ ① (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1 LICENSEE CODE: S C V C S 1 ② LICENSE NUMBER: 0 0 - 0 0 0 0 0 - 0 0 ③ LICENSE TYPE: 4 1 0 0 0 ④ CAT: ⑤

CON'T

0 1 REPORT SOURCE: L ⑥ DOCKET NUMBER: 0 5 0 0 0 3 9 5 ⑦ EVENT DATE: 0 9 1 4 8 3 ⑧ REPORT DATE: 0 9 2 7 8 3 ⑨

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES ⑩

0 2 On September 9, 1983, the fire barrier (Kaowool) surrounding the HVAC ducts in
0 3 the HVAC Chiller Rooms was removed in order to perform a Quality Control
0 4 Inspection. On September 14, 1983, it was recognized that an hourly fire watch
0 5 patrol had not been established as required by Action Statement (a) of Technical
0 6 Specification 3.7.10, "Fire Rated Assemblies." The consequence of this event was
0 7 the degradation of the three (3) hour fire barrier between the Chiller Rooms and
0 8 the Chilled Water Pump Room.

0 9 SYSTEM CODE: A B ⑪ CAUSE CODE: A ⑫ CAUSE SUBCODE: A ⑬ COMPONENT CODE: Z Z Z Z Z Z ⑭ COMP. SUBCODE: Z ⑮ VALVE SUBCODE: Z ⑯

⑰ LER/RO REPORT NUMBER: EVENT YEAR: 8 3 — SEQUENTIAL REPORT NO.: 1 0 4 / OCCURRENCE CODE: 0 1 REPORT TYPE: T — REVISION NO.: 0

ACTION TAKEN: X ⑱ FUTURE ACTION: Z ⑲ EFFECT ON PLANT: Z ⑳ SHUTDOWN METHOD: Z ㉑ HOURS ㉒: 0 0 0 0 ATTACHMENT SUBMITTED: Y ㉓ NPRD-4 FORM SUB.: N ㉔ PRIME COMP. SUPPLIER: Z ㉕ COMPONENT MANUFACTURER ㉖: Z 9 9 9

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS ㉗

1 0 The cause of this event was due to personnel error. Immediate corrective action
1 1 taken at 1430 hours, September 14, 1983, was the verification that the area fire
1 2 detectors were operable and the initiation of an hourly fire watch patrol. This
1 3 event has been discussed with the supervisory personnel to ensure that upon
1 4 authorizing work to start, the required fire watch patrol has been established.

1 5 FACILITY STATUS: E ㉘ % POWER: 1 0 0 ㉙ OTHER STATUS ㉚: N/A METHOD OF DISCOVERY: A ㉛ DISCOVERY DESCRIPTION ㉜: Document Review

1 6 ACTIVITY RELEASED: Z ㉝ CONTENT OF RELEASE: Z ㉞ AMOUNT OF ACTIVITY ㉟: N/A LOCATION OF RELEASE ㊱: N/A

PERSONNEL EXPOSURES

1 7 NUMBER: 0 0 0 ㊲ TYPE: Z ㊳ DESCRIPTION ㊴: N/A

PERSONNEL INJURIES

1 8 NUMBER: 0 0 0 ㊵ DESCRIPTION ㊶: N/A

LOSS OF OR DAMAGE TO FACILITY ㊸

1 9 TYPE: Z ㊷ DESCRIPTION: N/A

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PUBLICITY

2 0 ISSUED: N ㊹ DESCRIPTION ㊺: N/A

NRC USE ONLY

NAME OF PREPARER: R. J. Bouknight PHONE: (803) 345-5209

8310070278 830927
PDR ADOCK 05000395
S PDR

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

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

USNRC REGION II
ATLANTA, GEORGIA

83 OCT 4 A8:53

September 27, 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
Fourteen Day Written Report
LER 83-104

Dear Mr. O'Reilly:

Please find attached Licensee Event Report #83-104 for Virgil C. Summer Nuclear Station. This Fourteen Day Report is required by Technical Specification 6.9.1.12.(b) as a result of failure to comply with Action Statement (a) of Technical Specification 3.7.10, "Fire Rated Assemblies," on September 9, 1983.

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

Very truly yours,

for O. W. Dixon, Jr.

RJB:OWD/mac
Attachment

cc: V. C. Summer
E. C. Roberts
E. H. Crews, Jr.
T. C. Nichols, Jr./O. W. Dixon, Jr.
H. N. Cyrus
Group Managers
O. S. Bradham
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A. R. Koon
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EVENT DESCRIPTION AND PROBABLE CONSEQUENCES

On September 9, 1983, the fire barrier (Kaowool) surrounding the HVAC ducts in the HVAC Chiller Rooms was removed in order to perform a Quality Control inspection. On September 14, 1983, it was recognized that an hourly fire watch patrol had not been established as required by Action Statement (a) of Technical Specification 3.7.10, "Fire Rated Assemblies."

The consequence of this event was the degradation of the three (3) hour fire barrier between the Chiller Rooms and the Chilled Water Pump Room. The Chiller Rooms and the Chilled Water Pump Room are located in the Intermediate Building at the 412' elevation. The physical arrangement of the rooms from East to West are: Chiller Room A, Chiller Pump Room, Chiller Room C, and Chiller Room B. The fire barrier (Kaowool) surrounding the HVAC ducts was installed because the fire dampers were located at the vents in each room rather than at the walls so that closure of a fire damper would affect HVAC only in the room in which the postulated fire was located. Each room contains smoke detectors which were operable. There also exists a smoke detector in the HVAC duct which alarms on the HVAC Control Board in the Main Control Room. The Chilled Water Pump Room is equipped with a preaction sprinkler system which was operable. Also located in the immediate area of the Chiller Rooms are manual hose stations and portable fire extinguishers.

Estimated combustible loadings within this building area are as follows:

a) Chiller Rooms A, B, and C
    1) Chiller lubricating oil, 2,128,000 Btu, each room.
    2) Cable insulation, a small amount, routed through conduit, not quantified, each room.

b) Chilled Water Pump Room
    1) Pump lubricating oil, 57,000 Btu, total for all three (3) pumps.
    2) Cable insulation, small amount, routed through conduit, not quantified.

Total Btu content of each Chiller Room is 2,128,000 Btu; Btu content of the Chilled Water Pump Room is 57,000 Btu. Fire loading of each Chiller Room is 6,600 Btu/ft^2 and 163 BTu/ft^2 for the Chilled Water Pump Room, which are extremely low loadings.

Each of the Chiller Rooms and the Chilled Water Pump Room is provided with a drain sump. The sump in the Pump Room drains to Chiller Room "A" and from there to a sump outside the building area. The Chiller Room "C" sump drains to the sump in Chiller Room "B" and from there to a sump outside the building area.

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES - Continued

The 14 gallons of oil in each Water Chiller constitutes the only specific fire hazard in these areas. Loss of all the oil from any one Chiller would result in less than six inches (6") of oil in a Chiller Room sump, assuming no draining. As previously noted, the Chilled Water Pump Room sump drains to the Chiller Room "A" sump. Since the Chiller Room "A" sump is six inches (6") lower than the drain pipe from the Chilled Water Pump Room sump, oil lost from Chiller "A" will not flow back to the Chilled Water Pump Room. Also, as previously noted, the Chiller Room "C" sump drains to the chiller room "B" sump. Therefore, a fire in the chiller room "C" could expose Chiller Room "B" to fire. Only one Chiller and its associated Chilled Water Pump is required for safe shutdown. Under the aforementioned condition, a fire in Chiller Rooms "C" and "B" would not have affected Chiller Room "A", and the operability of one Chiller and the related Chilled Water Pump would be maintained.

In the event of a fire in chiller room "A", no other Chilled Water system equipment would be affected and spread of fire through the unprotected ladder opening in the ceiling would affect only other safety related train A equipment (i.e., Service Water Booster Pump area cooling unit "A").

CAUSE AND CORRECTIVE ACTIONS

The cause of this event was due to personnel error. Immediate corrective action taken at 1430 hours, September 14, 1983, was the verification that the area fire detectors were operable and the initiation of an hourly fire watch patrol. This event has been discussed with the supervisory personnel to ensure that upon authorizing work to start, the required fire watch patrol has been established.