

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Virgil C. Summer Nuclear Station										DOCKET NUMBER (2) 0 5 0 0 0 3 9 5					PAGE (3) 1 OF 0 2										
TITLE (4) Challenge of Overpressure Protection System																									
EVENT DATE (5)			LER NUMBER (6)				REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)															
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES				DOCKET NUMBER(S)												
0	5	0	6	8	5	8	5	0	1	4	0	0	0	6	0	5	8	5	0	5	0	0	0		
OPERATING MODE (9) 5			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)																						
POWER LEVEL (10) 1 10			20.402(b)				20.406(c)				<input checked="" type="checkbox"/> 50.73(a)(2)(iv)				<input type="checkbox"/> 3.7(b)										
			20.406(a)(1)(i)				50.36(c)(1)				<input type="checkbox"/> 50.73(a)(2)(v)				<input type="checkbox"/> 73.71(c)										
			20.406(a)(1)(ii)				50.36(c)(2)				<input type="checkbox"/> 50.73(a)(2)(vi)				<input checked="" type="checkbox"/> OTHER (Specify in Abstract below and in Text, NRC Form 366A)										
			20.406(a)(1)(iii)				50.73(a)(2)(i)				<input type="checkbox"/> 50.73(a)(2)(vii)(A)														
			20.406(a)(1)(iv)				50.73(a)(2)(ii)				<input type="checkbox"/> 50.73(a)(2)(vii)(B)														
			20.406(a)(1)(v)				50.73(a)(2)(iii)				<input type="checkbox"/> 50.73(a)(2)(ix)				Special Reports										
LICENSEE CONTACT FOR THIS LER (12)																									
NAME A. R. Koon, Jr., Assoc. Mgr., Regulatory Compliance										TELEPHONE NUMBER 8 10 13 3 4 5 1 5 12 0 9															
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																									
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC															
SUPPLEMENTAL REPORT EXPECTED (14)										EXPECTED SUBMISSION DATE (15)			MONTH DAY YEAR												
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)										<input checked="" type="checkbox"/> NO															

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

The events of May 6, 1985 resulted in a Diesel Generator (D/G) non-valid test failure, an Engineered Safety Features (ESF) Blackout Load Sequencer actuation, and a challenge to the Overpressure Protection System. The ESF actuation is reported in accordance with 10CFR50.73(a)(2)(iv). The D/G non-valid test failure and challenge to the Overpressure Protection System are reported in accordance with the Special Report requirements of the Licensee's Technical Specifications 4.8.1.1.3 and 3.4.9.3, respectively.

8506170551 850605  
PDR ADOCK 05000395  
S PDR

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/86

FACILITY NAME (1)  Virgil C. Summer Nuclear Station	DOCKET NUMBER (2)  0 5 0 0 0 3 9 5 8 5	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 5	0 1 4	0 0	0 2	OF	0 2

TEXT (If more space is required, use additional NRC Form 366A's) (17)

On May 6, 1985 at approximately 2200 hours, a Reactor Coolant System (RCS) pressure transient resulted in a challenge of a Residual Heat Removal (RHR) suction relief valve. The plant was in cold shutdown (Mode 5) with RHR system (Train "A") in operation. The shutdown was for the purpose of plugging steam generator tubes. Diesel generator (D/G) surveillance testing was in progress and had resulted in a non-valid test failure during an attempt to parallel the D/G to the ESF bus (XSW-1DB). The failure to parallel the D/G was a result of an apparent syncroscope and voltmeter failure.

During troubleshooting activities on the D/G, a personnel error occurred when the potential transformer (PT) drawer for the ESF bus (XSW-1DB) was pulled out instead of the PT drawer for the D/G. The D/G selector switch was in the maintenance position; therefore, the error resulted in a loss of ESF bus (XSW-1DB). Major equipment affected included the loss of the "B" Component Cooling Water (CCW) pump, "B" Service Water (SW) pump, and "B" HVAC Chiller and Chill Water pump. The loss of CCW flow to the Reactor Coolant Pump (RCP) required the shutdown of the operating RCP. The breaker was reclosed to ESF bus (XSW-1DB) and the bus was reloaded.

Upon restart of the RCP with solid plant operation, pressure spikes occurred which resulted in the challenge to the Train "A" RHR suction relief valve. The RCP was once again shutdown. Following the relief valve actuation, an operator noted that Pressurizer Relief Tank (PRT) level continued to increase apparently due to a failure of the relief valve to reseal. An operator was immediately dispatched to energize the RHR loop suction valve for Train "A". RHR was swapped to Train "B" and the Train "A" loop suction valve was shut, stopping the loss of RCS inventory to the PRT. The closure of the Train "A" loop suction valve allowed the relief valve to reseal. The loop suction valve to Train "A" RHR was reopened without loss of RCS inventory and Train "A" RHR was placed back in service.

There were no adverse consequences as a result of this event. Approximately sixteen hundred (1600) gallons of RCS inventory were released to the PRT. The load sequencer responded properly to the blackout on the ESF bus; however, with the associated D/G out for maintenance the loading of the bus could not be completed.

Further investigation of the D/G failure, revealed that the problem was not with the syncroscope or voltmeter circuitry but involved the contacts for the main control board switch for speed control of the D/G. The contacts were cleaned, the D/G successfully tested and returned to service. The test failure was considered to be non-valid due to the fact that the speed control circuitry is bypassed in the Emergency Mode and would not have prevented the D/G from performing its intended function. The personnel error was a result of a misunderstanding on the part of the electrical technician as to which potential transformer (PT) was to be removed. The PT drawers have been labeled with the appropriate warnings concerning bus de-energization. This action is expected to preclude recurrence of similar events. In addition an engineering evaluation of relief valve performance and RCP starts during solid plant operations will be conducted by the licensee to determine if further corrective action is warranted.

SOUTH CAROLINA ELECTRIC & GAS COMPANY

POST OFFICE 784

COLUMBIA, SOUTH CAROLINA 29218

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

June 5, 1985

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

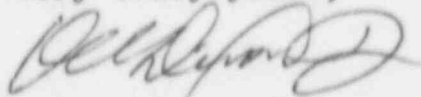
SUBJECT: Virgil C. Summer Nuclear Station  
Docket No. 50/395  
Operating License No. NPF-12  
LER 85-014

Dear Sir:

Attached is Licensee Event Report #85-014 for the Virgil C. Summer Nuclear Station. This Report is submitted pursuant to the requirements of 10CFR50.73(a)(2)(iv) and Special Report requirements of Technical Specifications 4.8.1.1.3 and 3.4.9.3.

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

Very truly yours,



O. W. Dixon, Jr.

RMF:OSB/lcd  
Attachment

cc: V. C. Summer  
T. C. Nichols, Jr./O. W. Dixon, Jr.  
E. H. Crews, Jr.  
E. C. Roberts  
W. A. Williams, Jr.  
D. A. Nauman  
J. Nelson Grace  
Group Managers  
O. S. Bradham  
C. A. Price  
S. R. Hunt

J. F. Heilman  
C. L. Ligon (NSRC)  
K. E. Nodland  
R. A. Stough  
G. Percival  
C. W. Hehl  
J. B. Knotts, Jr.  
S. D. Hogge  
INPO Records Center  
ANI Library  
NPCF  
File

LE22  
11