



South Carolina Electric & Gas Company  
P.O. Box 88  
Jenkinsville, SC 29065  
(803) 345-4344

Gary J. Taylor  
Vice President  
Nuclear Operations

January 2, 1997  
RC-97-0001

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

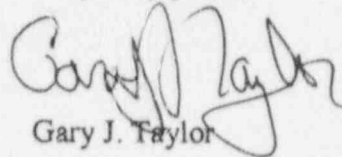
Gentlemen:

Subject: VIRGIL C. SUMMER NUCLEAR STATION  
DOCKET NO. 50/395  
OPERATING LICENSE NO. NPF-12  
LICENSEE EVENT REPORT (LER 96-010)

Attached is Licensee Event Report No. 96-010 for the Virgil C. Summer Nuclear Station. This report is submitted pursuant to the requirements of 10CFR50.73(a)(2)(i).

Should you have any questions, please call Mr. Kelley Marsh at (803) 345-4796.

Very truly yours,



Gary J. Taylor

RKM:GJT  
Attachment

c:	J. L. Skolds	K. R. Jackson
	W. F. Conway	D. L. Abstance
	R. R. Mahan (w/o attachment)	NPRDS Coordinator
	R. J. White	NRC Resident Inspector
	S. D. Ebneter	J. B. Knotts Jr.
	A. R. Johnson	INPO Records Center
	R. B. Clary	Marsh & McLennan
	S. F. Fipps	NSRC
	A. R. Koon	RTS (LER960010)
	G. E. Williams	File (818.07)
	T. L. Matlosz	DMS (RC-97-0001)
	S. A. Byrne	

070018  
9701070069 970102  
PDR ADOCK 05000395  
S PDR



NUCLEAR EXCELLENCE - A SUMMER TRADITION!

1/1  
Iezz

LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY INFORMATION COLLECTION REQUEST: 50.0 HRS. REPORTED LESSONS LEARNED ARE INCORPORATED INTO THE LICENSING PROCESS AND FED BACK TO INDUSTRY. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-6 F33), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)  
Virgil C. Summer Nuclear Station

DOCKET NUMBER (2)  
05000395

PAGE (3)  
1 OF 4

TITLE (4)  
Missed Surveillance on Slave Relay (K634)

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 NAME	DOCKET NUMBER
12	02	96	96	010	0	01	02	97	FACILITY NAME	05000
									FACILITY NAME	05000

OPERATING MODE (3)	POWER LEVEL (10)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)								
1	100	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(2)(i)	<input checked="" type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)
		<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71
		<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(vii)						OTHER

LICENSEE CONTACT FOR THIS LER (12)  
NAME: A. R. Rice, Manager, Nuclear Licensing & Operating Experience  
TELEPHONE NUMBER (include Area Code): (803) 345-4232

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)									
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS
D	JK			N					

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE).	NO						
	X						

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On December 2, 1996, plant personnel discovered that the portion of surveillance test procedure STP-220.002, "Turbine Driven Emergency Feedwater Pump Test," which started the pump from the Train A, Steam Generator Low-Low Actuation Slave Relay (K634), had not been performed within the time allowed by Technical Specification (TS) 4.3.2.1, Table 4.3-2. The test was completed with a manual start instead of the required Train A Slave Relay (K634) start. This quarterly slave relay test should have been performed by November 30, 1996.

The cause of this event is attributed to personnel oversight in not individually tasking each surveillance contained in the STPs. Individual surveillance tests could be delayed but there was no tracking mechanism in place to alert the responsible parties that the task would be overdue on a specific date. The emergency feedwater pump procedures contain multiple tasks; therefore, the failure to individually track each monthly or quarterly surveillance resulted in the test frequency error.

Review of testing performed with these procedures since Refueling Outage No. 8 (Fall of 1994) has identified an additional four (4) surveillance tests which were not performed within the allowed Technical Specification time frames. Each task contained in these procedures has now been individually identified and will be independently tracked during future testing to prevent recurrence. Reviews are currently being made of other plant procedures to verify that this problem is isolated to the emergency feedwater pump procedures. This review will be completed by February 28, 1997.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
V. C. Summer Nuclear Station	05000395	96	---010--	0	2 OF 4

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

**PLANT IDENTIFICATION**

Westinghouse - Pressurized Water Reactor

**EQUIPMENT IDENTIFICATION**

Train A, Steam Generator Low-Low Actuation Slave (K634) Relay  
EISS System Code - JK

**IDENTIFICATION OF EVENT**

Plant test personnel determined that the portion of surveillance test procedure STP-220.002, "Turbine Driven Emergency Feedwater Pump Test," which started the pump from the Train "A" Steam Generator Low-Low Actuation Slave Relay K634, had not been performed within the time allowed by Technical Specification Surveillance 4.3.2.1, Table 4.3-2 (Item 6). The test was completed with a manual start instead of the required Train A Slave Relay (K634) start. This quarterly slave relay test, with allowed extension, should have been completed on November 30, 1996. The testing missed was associated with only one of six channels available to start the Turbine Driven Emergency Feedwater pump. All other surveillances specific to the Turbine Driven Emergency Feedwater Pump were current, as specified in Technical Specification 4.3.2.1. Therefore, the Turbine Driven Emergency Feedwater pump was operable and available to be started.

**EVENT DATE**

December 2, 1996

**REPORT DATE**

January 2, 1997

This report was initiated by CER 960418.

**CONDITIONS PRIOR TO EVENT**

MODE 1 - 100% Reactor Power

**DESCRIPTION OF EVENT**

On December 2, 1996, plant personnel discovered that the portion of surveillance test procedure STP-220.002, "Turbine Driven Emergency Feedwater Pump Test," which starts the pump from the Train "A" Steam Generator Low-Low Actuation Slave Relay K634 had not been performed within the time allowed by Technical Specification 3.3.2, "Engineered Safety Feature Actuation System Instrumentation." Surveillance 4.3.2.1 (Table 4.3-2, Item 6) requires a quarterly test to verify the operability of this slave relay. Review of the surveillance history determined that the test had last been performed on August 7, 1996; therefore, the next test should have been performed no later than November 30, 1996, with the test frequency extension allowed under Technical Specification 4.0.2. The required testing of the Train A Slave Relay (K634) was subsequently performed on December 2, 1996.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

EXPIRES 5/31/95

FACILITY NAME (1)	DOCKET NUMBER	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
V. C. Summer Nuclear Station	05000395	96	--010--	0	3 OF 4

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

**CAUSE OF EVENT**

The cause of this event is attributed to personnel oversight in not individually tasking each surveillance contained in the STPs. Individual surveillance tests could be delayed but there was no tracking mechanism in place to alert the responsible parties that the task would be overdue on a specific date. The emergency feedwater pump procedures contain multiple tasks; therefore, the failure to individually track all monthly/quarterly surveillance tests contained in the procedures resulted in the test frequency error.

**ANALYSIS OF EVENT**

There were no safety consequences associated with this event. Surveillance tests performed subsequent to each of the missed surveillance tests verified that the equipment had been capable of performing its safety function during the interval between tests. In each case, the testing missed was associated with only one of six channels available to start the associated Emergency Feedwater pump. In every case, all other surveillances specific to each Emergency Feedwater Pump were current as specified in Technical Specification 4.3.2.1. Therefore, the Emergency Feedwater pumps were operable and available to be started.

**IMMEDIATE CORRECTIVE ACTIONS:**

The surveillance for the K634 Train "A" Steam Generator Low-Low Actuation Relay was subsequently performed on December 2, 1996 with satisfactory results. Following this test, plant personnel initiated a review of all Surveillance Test Procedures associated with the Inservice Testing Program to evaluate the potential for similar programmatic deficiencies. The results of this review showed that only the procedures which directed testing on the Emergency Feedwater Pumps had the potential for surveillance frequency errors. An in-depth review was then made of the following procedures:

STP-220.001A (Train "A" Test), Motor Driven Emergency Feedwater Pump and Valve Test - Procedure contains four monthly and quarterly surveillance items and implements Technical Specification Surveillance 4.3.2.1 and 4.7.1.2.a.1 for pump XPP0021A.

STP-220.001A (Train "B" Test), Motor Driven Emergency Feedwater Pump and Valve Test - Procedure contains four monthly and quarterly surveillance items and implements Technical Specification Surveillance 4.3.2.1 and 4.7.1.2.a.1 for pump XPP0021B.

STP-220.002, Turbine Driven Emergency Feedwater Pump Test - Procedure contains seven monthly, quarterly, and refueling surveillance items and implements Technical Specification Surveillance 4.3.2.1, 4.0.5, 4.7.1.2.a.2 and 4.3.2.2.

A review of the above listed surveillances from the present back to Refueling Outage No. 8 (Fall of 1994) was conducted. The results of this review showed that an additional four (4) surveillances were not performed within the interval specified by Technical Specifications (TS). Details of each finding are as follows:

K633 Train "A", Steam Generator Low-Low Level Actuation Relay, had missed its required quarterly surveillance (TS 4.3.2.1, Table 4.3-2 Item 6.b) on April 29, 1996. The required testing was subsequently completed on July 16, 1996.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
V. C. Summer Nuclear Station	05000395	96	--010--	0	4 OF 4

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

**IMMEDIATE CORRECTIVE ACTIONS (cont.):**

K633 Train "A", Steam Generator Low-Low Level Actuation Relay, had missed its required quarterly surveillance (TS 4.3.2.1, Table 4.3-2 Item 6.b) on October 28, 1994. The required testing was subsequently completed on January 17, 1995.

K633 Train "B", Steam Generator Low-Low Level Actuation Relay, had missed its required quarterly surveillance (TS 4.3.2.1, Table 4.3-2 Item 6.b) on November 11, 1994. The required testing was subsequently completed on January 10, 1995.

K634 Train B, Steam Generator Low-Low Level Actuation Relay, had missed its required quarterly surveillance (TS 4.3.2.1, Table 4.3-2 Item 6.b) on October 21, 1994. The required testing was subsequently completed on December 21, 1994.

**ADDITIONAL CORRECTIVE ACTIONS:**

The following additional corrective actions have been initiated:

- Surveillance's contained in Emergency Feedwater Pump test procedures STP-220.001A and STP-220.002 have been individually tasked under the plant's surveillance control program to insure that the due date for each task is recognized and adhered to during performance of surveillance's.
- A review will be made of surveillance test procedures, outside the Inservice Test Program, that perform multiple tasks to verify that similar problems do not exist in these procedures. This action will be completed by February 28, 1996.

**PRIOR OCCURRENCES:**

None