Form 244

CP&L

Carolina Power & Light Company

Company Correspondence

Brunswick Nuclear Project
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Southport, N.C. 28461-0429

AUG 5 1991

FILE: B09-13510C 10CFR50.73

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

BRUNSWICK STEAM ELECTRIC PLANT UNIT 1
DOCKET NO. 50-325
LICENSE NO. DRP-71
LICENSEE EVENT REPORT 1-91-017

Gentlemen:

In accordance with Title 10 of the Code of Federal Regulations, the enclosed Licensee Event Report is submitted. This report fulfills the requirement for a written report within thirty (30) days of a reportable occurrence and is submitted in accordance with the format set forth in NUREG-1022, September 1983.

Very truly yours,

R. B. Richardson for

J. W. Spencer, General Manager
Brunswick Nuclear Project

GT/

Enclosure

cc: Mr. S. D. Ebneter
Mr. N. B. Le
BSEP NRC Resident Office

IE27 1/1

NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104
EXPIRES: 4/30/92
ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Brunswick Steam Electric Plant Unit 1	05000325	1

TITLE (4) RWCU Isolation on Failure of Nonregenerative Heat Exchanger Temperature Switch

EVENT DATE (5)			LER NUMBER (6)					REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR		SEQ. NO.		REV. NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
7	6	91	91	-	017	-	0					

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)							
			20.402(b)		20.405(c)	X	50.73(a)(2)(iv)		73.71(b)
POWER LEVEL (10)	100		20.405(a)(1)(i)		50.36(c)(1)		50.73(a)(2)(v)		73.71(c)
			20.405(a)(1)(ii)		50.36(c)(2)		50.73(a)(2)(vii)		OTHER (Specify in Abstract and Text)
			20.405(a)(1)(iii)		50.73(a)(2)(i)		50.73(a)(2)(viii)(A)		
			20.405(a)(1)(iv)		50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)		
			20.405(a)(1)(v)		50.73(a)(2)(iii)		50.73(a)(2)(x)		

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
Glen M. Thearling, Regulatory Compliance Specialist	(919) 457-2038

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	
X	CE	TT	F081	Y							

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
	YES (If yes, complete EXPECTED SUBMISSION DATE)	X	NO				

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

On July 6, 1991, with Unit 1 at 100% power, the Reactor Water Cleanup System (RWCU) Inlet Outboard Isolation Valve (1-G31-F004) auto closed when the Non Regenerative Heat Exchanger Outlet temperature was sensed to be 135° F. The Control Operator shut the RWCU Inlet Inboard Isolation Valve (1-G31-F001), which does not receive an auto closure from this signal, to ensure the line was isolated. An Auxiliary Operator found the indicator for temperature switch/transmitter 1-G31-TS-N008 pegged upscale.

While this temperature switch/transmitter (1-G31-TS-N008) does not provide a Technical Specification Primary Containment Isolation System (PCIS) signal it does actuate one of the RWCU PCIS Group 3 isolation valves (1-G31-F004).

Investigation by Instrumentation and Control technicians determined that the temperature switch/transmitter had failed due to an internal fault. With 1-G31-TS-N008 replaced and calibrations completed, at 0450 on July 7, 1991 Operations unisolated RWCU to return it to service.

INITIAL CONDITIONS

On July 6, 1991, at 0719, Unit 1 was at 100% power with RWCU in service.

EVENT NARRATIVE

The Unit 1 Control Room Operators responded to an annunciator for "NON REGEN HX DISCH HIGH TEMP" (setpoint @ 135° F) and the associated automatic closure of the RWCU Inlet Outboard Isolation Valve (1-G31-F004). There was no other indication in the Control Room that confirmed this as a valid isolation signal. Investigation by Auxiliary Operators in the Reactor Building found the indicator for temperature switch/transmitter 1-G31-TS-N008 pegged upscale and no other abnormal conditions that would be expected with this type of event. Instrumentation and Control Technicians determined that the Fenwal Inc. model #551 temperature switch/transmitter (1-G31-TS-N008) had failed due to an internal fault. With the temperature switch/transmitter replaced and the calibrations completed, Operations unisolated RWCU to return it to service at 0450 on July 7, 1991.

CAUSE OF EVENT

Due to an internal fault temperature switch/transmitter 1-G31-TS-N008 failed upscale. This appears to be an isolated failure for this temperature switch/transmitter, though it has been replaced in the past due to not being able to meet calibration requirements.

CORRECTIVE ACTIONS

Temperature switch/transmitter 1-G31-TS-N008 was replaced and RWCU returned to service.

SAFETY ASSESSMENT

This event does not present a safety concern. The RWCU system responded as designed with the automatic closure of the RWCU Inlet Outboard Isolation Valve (1-G31-F004). Failure of the temperature switch/transmitter (1-G31-TS-N008) is not safety significant since its function is to protect the RWCU filter demineralizer resin from over temperature conditions.

PREVIOUS SIMILAR EVENTS

There have been closure events due to valid high temperatures but none because of this components failure.

EIIS COMPONENT IDENTIFICATION

System/Component	EIIS Code
PCIS	JM
RWCU/Temperature Transmitter	CE/TT