



Brunswick Nuclear Plant
P.O. Box 10429
Southport, NC 28461-0429

OCT 17 1994

SERIAL: BSEP-94-0427
10CFR50.73

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

BRUNSWICK NUCLEAR PLANT UNIT 1
DOCKET NO. 50-325/LICENSE NO. DRP-71
LICENSEE EVENT REPORT 1-94-012

Gentlemen:

In accordance with the Code of Federal Regulations, Title 10, Part 50.73, Carolina Power & Light Company submits the enclosed Licensee Event Report. 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.

Please refer any questions regarding this submittal to Mr. M. A. Turkal at (910) 457-3066.

Very truly yours,

J. Cowan, Director-Site Operations
Brunswick Nuclear Plant

SFT/

Enclosures

1. Licensee Event Report
2. Summary of Commitments

cc: Mr. S. D. Ebner, Regional Administrator, Region II
Mr. P. D. Milano, NRR Project Manager - Brunswick Units 1 and 2
Mr. C. A. Patterson, Brunswick NRC Senior Resident Inspector
The Honorable H. Wells, Chairman - North Carolina Utilities Commission

9410250027 941014
PDR ADDCK 05000325
S PDR

10221

EXPIRES: 5/31/95

LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714) 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)

Brunswick Steam Electric Plant, Unit 1

DOCKET NUMBER (2)

05000325

PAGE (3)

1 of 3

TITLE (4)

HPCI Declared Inoperable Due to Failure of the Lube Oil Cooling Water Supply Valve Control Power Fuse

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
09	22	94	94	- 12 -	00	10	14	94	FACILITY NAME	DOCKET NUMBER
										05000
									FACILITY NAME	DOCKET NUMBER
										05000

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

Steve F. Tabor, Regulatory Affairs Specialist

TELEPHONE NUMBER

(910) 457-2178

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRPDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRPDS

SUPPLEMENTAL REPORT EXPECTED (14)

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

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

On September 22, 1994, at approximately 0855 hours, while Units 1 and 2 were operating at rated power, the Unit 1 High Pressure Coolant Injection (HPCI) system lube oil cooling water supply valve, 1-E41-F059, control power fuse failed. Prior to this event, workers moving a material transport cart inadvertently struck the 1-E41-F059 Motor Control Center (MCC) cubicle. At 0905 hours HPCI was declared inoperable due to the loss of power to the 1-E41-F059. At the time of this event the 1B RHR pump was inoperable due to planned maintenance. Consequently, the requirements of Technical Specification 3.5.1, High Pressure Coolant Injection System Limiting Condition For Operation could not be satisfied and the requirements of Technical Specification 3.0.3 were invoked.

The cause of this event is attributed to inadequate self-checking and job scope walkdown. The involved personnel have been counselled and the appropriate plant personnel have been briefed on the lessons learned from this event. Similar events have been previously reported in LERs 1-94-009 and 2-94-003. This event is of minimal safety significance in that the Automatic Depressurization System, the Core Spray System, and Low Pressure Coolant Injection (LPCI) System with the exception of the 1B RHR pump were operable during the time the HPCI System was declared inoperable. Although the 1B RHR pump had been removed from service, the pump was prepared for return to service if necessary.

The cause classification for this event per the criteria of NUREG-1022 is A, personnel error.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), 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)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Brunswick Steam Electric Plant Unit 1	05000325	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 of 3
		94	- 12 -	00	

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

TITLE

HPCI Declared Inoperable Due to Failure of the Lube Oil Cooling Water Supply Valve Control Power Fuse

INITIAL CONDITIONS

On September 22, 1994, Units 1 and 2 were operating at rated power. The Unit 1 Emergency Core Cooling systems were operable with the exception of the 1B Residual Heat Removal (RHR) pump which had been removed from service due to planned maintenance.

EVENT NARRATIVE

On September 22, 1994, at approximately 0855 hours, two workers were moving a material transport cart on the 20' elevation of the Unit 1 Reactor Building in the vicinity of a rail car used to transport the fuel cask. As a precautionary measure, the general area surrounding the rail car area was roped off with yellow and black caution tape suspended by stanchions. The barricaded area extended to within 3 1/2 feet of Motor Control Center (MCC) 1XDA and ran parallel with the full length of the MCC. This forced the traffic in the area to be routed by the MCC. While maneuvering the cart through the pathway between the barricade and the MCC, the workers inadvertently struck MCC 1XDA compartment B15 with the cart. MCC 1XDA, compartment B15 is the power supply for 1-E41-F059, the High Pressure Coolant Injection system lube oil cooling water supply valve. Following contact with the MCC the workers noticed that the 1-E41-F059 open position indicating light's (red) lens cover was no longer attached to the light assembly. The workers then contacted the area auxiliary operator (AO) who replaced the red lens cover. While replacing the red lens cover the AO noticed that the 1-E41-F059 closed position indicating light, which is normally energized with the HPCI system in the standby condition, was de-energized. Finding the open position indicating light bulb discolored the AO attempted to replace the bulb. While attempting to replace the bulb, the glass bulb broke away from the base of the bulb. At 0905 hours, the AO contacted the control room which in turn dispatched Electrical/I&C maintenance to correct the situation. Additionally, Operations declared HPCI inoperable. At the time of the event the 1B RHR pump was inoperable due to planned maintenance. Consequently, the requirements of Technical Specification 3.5.1, High Pressure Coolant Injection System Limiting Condition For Operation could not be satisfied and the requirements of Technical Specification 3.0.3 were invoked.

Investigation into the cause of the failed open indicating light revealed that the bulb base had shorted to the light socket resulting in an overcurrent condition which caused the 1-E41-F059 control power fuse to fail. By 1009 hours, the light socket assembly was replaced, the HPCI system restored to service, and the Technical Specification 3.0.3 exited.

EXPIRES: 5/31/95

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), 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.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Brunswick Steam Electric Plant Unit 1	05000325	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 of 3
		94	- 12 -	00	

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

CAUSE OF EVENT

This event resulted from the failure to take the necessary precautions for preventing contact between the material transport cart and the MCC. Self-checking was not fully applied by the workers to ensure their intended actions were correct. The workers did not question whether the barricade could be relocated to allow more space for movement of the cart. They also did not consider the turn radius of the cart when assessing the clearance needed to successfully move the cart past the MCCs. Additionally, job scoping did not identify special circumstances/conditions. The workers did not walkdown the route of movement prior to starting the work. Had they been aware of the restricted traffic area, they could have declined to move the material until the area was clear. Consequently, the cart impact on the MCC is believed to have caused the open indicating light bulb filament to fail. During the light bulb replacement the bulb glass separated from the base of the bulb which produced a short circuit current and subsequent failure of the control power fuse.

CORRECTIVE ACTIONS

Workers involved in this event were disciplined regarding the importance of maintaining a questioning attitude and when faced with uncertainty to not proceed.

Additionally, appropriate plant personnel have been briefed on the lessons learned from this event including the need to be aware of physical safety barriers which can be encountered at anytime and may require changes in work scope and the importance of pre-job walk downs.

SAFETY ASSESSMENT

The Automatic Depressurization System, the Core Spray System, and Low Pressure Coolant Injection (LPCI) System, with the exception of the 1B RHR pump were operable during the time the HPCI system was not available. Although the 1B RHR pump had been removed from service, the pump was prepared for return to service at the time of the event and was capable of fulfilling its intended safety function.

PREVIOUS SIMILAR EVENTS

Previous similar events have been reported in LERs 1-94-009 and 2-94-003.

EIIS COMPONENT IDENTIFICATIONSystem/ComponentEIIS Code

High Pressure Coolant Injection System
Control Power/Fuse

BJ
JC/FU

Enclosure
List of Regulatory Commitments

The following table identifies those actions committed to by Carolina Power & Light Company in this document. Any other actions discussed in the submittal represent intended or planned actions by Carolina Power & Light Company. They are described to the NRC for the NRC's information and are not regulatory commitments. Please notify the Manager-Regulatory Affairs at the Brunswick Nuclear Plant of any questions regarding this document or any associated regulatory commitments.

Commitment	Committed date or outage
NONE	