CP&L

Carolina Power & Light Company
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SERIAL: BSEP-95-0614
10 CFR 50.73

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 1-95-020

Gent'emen:

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. K. A. Harris at (910) 457-3312.

Very truly yours,

W. Levis, Director-Site Operations
Brunswick Nuclear Plant

SFT/

Enclosures
1. Licensee Event Report
2. Summary of Commitments

cc: Mr. S. D. Ebneter, Regional Administrator, Region II
Mr. D. C. Trimble, Jr., 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

IE22
1/1

NRC FORM 366 (5/92) U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

APPROVED OMB NO. 3150-0104
EXPIRES: 5/31/95

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

TITLE (4)
Control Building Emergency Air Filtration System (CBEAF) Unable To Maintain Positive Control Room Pressure In The Radiation Protection Mode

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
									BSEP-Unit 2	50-324
10	25	95	95	- 20 -	00	11	21	95	FACILITY NAME	DOCKET NUMBER 05000

OPERATING MODE (9)	1
POWER LEVEL (10)	100

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)		50.73(a)(2)(iv)		73.71(b)
	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
	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)	X	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
Steve F. Tabor, Regulatory Affairs Specialist	(910) 457-2178

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

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
X	YES (If yes, complete EXPECTED SUBMISSION DATE)		NO		01	15	96

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

On October 25, 1995, testing of the control room pressure envelope was initiated to obtain baseline differential pressure data to support future plant enhancements. Upon entering the radiation protection mode of the Control Building Emergency Air Filtration (CBEAF) system, control room pressure was measured to be -0.04 inches of water. Control room pressure is required by the Technical Specifications to be positive to minimize radioactive material intrusion into the control room during accident conditions. System configuration changes restored control room positive pressure within approximately 2.5 hours following the test and compensatory actions were implemented to ensure control room pressure remained positive with the CBEAF system configured in the radiation protection mode while investigation into the cause of the negative pressure is completed. An operability assessment of the above configuration was immediately initiated and completed on October 29, 1995. This assessment concluded that operability of the CBEAF system could be assured provided certain restrictions on CBEAF system configuration are maintained. In conjunction with this assessment, troubleshooting continues and a root cause analysis is in progress to determine the cause of the event. Additionally, further evaluation is in progress to determine the significance of the as found conditions with respect to the design basis of the CBEAF system specified in the General Design Criteria 19. A supplement to this LER will be submitted to report the results of these analyses and identify additional corrective actions.

TITLE

Control Building Emergency Air Filtration (CBEAF) System Unable To Maintain Positive Control Room Pressure In The Radiation Protection Mode

INITIAL CONDITIONS

On October 25, 1995, Unit 1 was operating at 100% power and Unit 2 was operating at 88% power. Testing of the control room pressure envelope was in progress.

EVENT NARRATIVE

On October 25, 1995, testing of the control room pressure envelope was initiated to develop baseline data to support future plant enhancements. With the control building ventilation system configured in the normal mode of operation, control room pressure was measured at +0.03 inches of water. Subsequently, with the system configured in the radiation protection mode (CBEAF), control room pressure was measured at -0.04 inches of water.

On October 25, 1995, at 2030 hours, an engineering evaluation was initiated to assess the operability of the CBEAF system. Troubleshooting activities were initiated to reverify CBEAF system lineup, and verify the condition and position of associated ductwork and dampers. System configuration changes restored control room positive pressure within approximately 2.5 hours following the test and compensatory actions were implemented to ensure control room pressure remained positive with the CBEAF system configured in the radiation protection mode.

On October 29, 1995, the engineering evaluation concluded that operability of the CBEAF system could be assured provided certain restrictions on CBEAF system configuration were maintained. The engineering evaluation also validated the acceptability of each of the restrictions on operation of the ventilation system for this interim period. Plant operating procedures have been revised to implement the necessary configuration changes for the radiation protection mode. Additionally, further evaluation is in progress to determine the significance of the as found conditions with respect to the design basis of the CBEAF system specified in the General Design Criteria 19.

CAUSE OF EVENT

A root cause investigation is in progress. Although several contributors to degraded system performance were identified during both the initial troubleshooting and the operability assessment, the cause of this event has not been conclusively determined. CP&L will provide the results of this investigation in a supplement to this LER.

CORRECTIVE ACTIONS

In addition to the operability assessment and the root cause investigation, CP&L has formed a project team to develop and implement a plan for system optimization of the control building ventilation systems and interacting ventilation systems. Included in the charter of this team is flow balancing of the control building ventilation subsystems and necessary system repairs. The project team has implemented this plan. The information acquired during the optimization effort will be used to support the completion of the root cause analysis, the identification of additional corrective actions, and assessment of the safety significance of this event. The results of the root cause investigation and system optimization will be provided in a supplement to this LER.

SAFETY ASSESSMENT

The assessment of the safety significance of this event will be provided in a supplement to this LER following completion of the root cause investigation and system optimization.

PREVIOUS SIMILAR EVENTS

Events involving the inoperability of the CBEAF system have been reported previously in LERs 1-90-007, 1-91-022, and 1-94-002; however, these reports did not involve the inability to maintain positive control room pressure in the radiation protection mode.

EIIS COMPONENT IDENTIFICATION

System/Component	EIIS Code
Control Building Emergency Air Filtration System	VI

Condition Report # 95-02665

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	