CP&L

Carolina Power & Light Company
P.O. Box 10429
Southport, NC 28461-0429

AUG 2 5 1995

SERIAL: BSEP-95-0436
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 1-95-017

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

Very truly yours,

W. Levis, Plant General Manager
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, 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

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

LICENSEE EVENT REPORT (LER)

APPROVED OMB NO. 3150-0104
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.

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

TITLE (4)
UNPLANNED ENGINEERED SAFETY FEATURE ACTUATION WHILE OBTAINING MAIN STACK EFFLUENT GAS SAMPLE

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
08	05	95	95	- 17 -	00	08	25	95	Brunswick-Unit 2	50-324
									FACILITY NAME	DOCKET NUMBER

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		
			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	TELEPHONE NUMBER
Steve Tabor, Regulatory Affairs, Sr. Analyst	(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
	YES (If yes, complete EXPECTED SUBMISSION DATE)	X	NO				

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

On August 5, 1995, at 1346 hours, with both units operating at rated power, an invalid Main Stack Wide Range Gas Monitor (WRGM) high radiation trip signal occurred while obtaining a gaseous grab sample from the Main Stack WRGM. The high radiation signal resulted in a Group 6 (Containment Atmospheric Control) system and Secondary Containment isolations on both units. The WRGM radiation readings returned to normal within seconds of the Engineered Safety Feature (ESF) system actuations. By 1429 hours, the isolation signals were reset and the affected systems restored to normal configuration on both units. The Main Stack WRGM high radiation signal resulted from fluctuations in the WRGM sample flow rate. The flow fluctuations occurred during the valving operations performed to establish the normal WRGM flow path after sampling. Flow oscillations during sampling, augmented by elevated radiation count levels due to fuel leakage in the Unit 2 reactor, resulted in a sensed momentary high radiation count level above the Main Stack WRGM high radiation trip setpoint. The WRGM sampling procedure did not provide adequate controls for minimizing flow oscillations during sampling. The WRGM sampling procedure has been revised to minimize flow oscillations and, as an added precaution, require bypassing the WRGM actuation logic during sampling. Additionally, an evaluation of other effluent radiation monitor sampling procedures will be performed to determine whether similar problems exist. This event has minimal safety significance in that an actual high radiation condition did not exist and the affected Engineered Safety Feature systems responded as designed. The NUREG 1022 cause classification for this event is D, Defective Procedure.

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

TITLE

UNPLANNED ENGINEERED SAFETY FEATURE ACTUATION WHILE OBTAINING MAIN STACK EFFLUENT GAS SAMPLE

INITIAL CONDITIONS

On August 5, 1995, both Units 1 and 2 were operating at 100% power. Increased sampling of the Main Stack Wide Range Gas Monitor gaseous effluent had been established due to implementing a Unit 2 failed fuel action plan.

EVENT NARRATIVE

On August 5, 1995, at approximately 1330 hours, Environmental and Radiation Control technicians initiated gaseous sampling of the Main Stack WRGM in accordance with sampling procedure, E&RC-2002. During removal of the sampler and reestablishment of normal flow to the system, the Control Room received a Main Stack WRGM "downscale/inop" alarm followed immediately by a Main Stack WRGM "high" and "high high" radiation alarm. At 1346 hours, a dual unit Group 6 (Containment Atmospheric Control) system and Units 1 and 2 Secondary Containment isolations occurred. Additionally, the Standby Gas Treatment systems on both units started. After verifying that the actuations resulted from an invalid Main Stack WRGM high radiation signal, the isolation signals were reset and the affected systems on both units were returned to normal configuration by 1429 hours.

This report is being reported in accordance with the requirements of 10 CFR 50.73 (a) (2) (iv) in that the actuation of the Main Stack WRGM resulted in an unplanned actuation of Engineered Safety Feature systems.

CAUSE OF EVENT

This event was caused by an inadequate Main Stack WRGM sampling procedure. The Main Stack WRGM high radiation signal resulted from fluctuations in the WRGM sample flow rate. The flow fluctuations occurred during the valving operations performed to reestablish the normal WRGM flow path after sampling. As designed, the WRGM integrator circuit produces a higher radiation output value at low flow conditions. Flow oscillations during sampling, augmented by elevated radiation count levels due to fuel leakage in the Unit 2 reactor, resulted in a sensed momentary high radiation count level above the Main Stack WRGM high radiation trip setpoint. The WRGM sampling procedure did not provide adequate controls for minimizing flow oscillations during sampling.

CORRECTIVE ACTIONS

E&RC-2002, "Sampling of Radioactive Airborne Effluent Releases", has been revised to minimize flow oscillations while removing the sampler and, as an added precaution, require bypassing the WRGM actuation logic prior to sampling.

An evaluation of other effluent radiation monitor sampling procedures will be performed by September 30, 1995, to determine whether enhancements to valving operations are needed.

SAFETY ASSESSMENT

This event has minimal safety significance in that an actual high radiation condition did not exist and the affected Engineered Safety Feature systems responded as designed.

PREVIOUS SIMILAR EVENTS

No previous similar events were identified.

EIIS COMPONENT IDENTIFICATION

System/Component	EIIS Code
Radiation Monitoring System	IL
Containment Atmospheric Control	IK
Reactor Building Ventilation	VA
Standby Gas Treatment	BH

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
An evaluation of other effluent radiation monitor sampling procedures will be performed to determine whether enhancements to valving operations are needed.	9/30/95