



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

MAR 1 1996

SERIAL: BSEP 96-0087
10 CFR 50.73

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

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 AND 50-324/LICENSE NOS. DPR-71 AND DPR-62
LICENSEE EVENT REPORT 2-96-01

Gentlemen:

In accordance with the Code of Federal Regulations, Title 10, Part 50.73, Carolina Power & Light Company submits the enclosed voluntary Licensee Event report. This report is submitted in accordance with the format set forth in NUREG-1022, September 1983.

Please refer any questions regarding this submittal to Mr. George Honma at (910) 457-2741.

Sincerely,

W. Levis
Director-Site Operations
Brunswick Nuclear Plant

SFT/wrm

Enclosures

1. Licensee Event Report
2. Summary of Commitments

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

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LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

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-0 F30), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20565-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Brunswick Steam Electric Plant, Unit 2	DOCKET NUMBER (2) 05000324	PAGE (3) 1 OF 1
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TITLE (4)
Control Rod Average 5% Insertion Time Exceeds Technical Specification Requirements

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
02	02	96	96	-- 01	-- 00	03	01	96		05000
									FACILITY NAME	DOCKET NUMBER
										05000

OPERATING MODE (9) 01	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)									
	20.2201(b)	20.2203(a)(2)(v)	50.73(a)(2)(i)	50.73(a)(2)(viii)						
POWER LEVEL (10) 25	20.2203(a)(1)	20.2203(a)(3)(i)	50.73(a)(2)(ii)	50.73(a)(2)(x)						
	20.2203(a)(2)(i)	20.2203(a)(3)(ii)	50.73(a)(2)(iii)	73.71						
	20.2203(a)(2)(ii)	20.2203(a)(4)	50.73(a)(2)(iv)	X OTHER	Specify in Abstract below or in NRC Form 366A					
	20.2203(a)(2)(iii)	50.36(c)(1)	50.73(a)(2)(v)							
	20.2203(a)(2)(iv)	50.36(c)(2)	50.73(a)(2)(vii)							

LICENSEE CONTACT FOR THIS LER (12)	
NAME Steve Tabor, Sr. Analyst - Regulatory Affairs	TELEPHONE NUMBER (Include Area Code) (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
X	AA	V	G080	Y					

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED SUBMISSION DATE (15)		
X	YES (If yes, complete EXPECTED SUBMISSION DATE)	NO		MONTH	DAY	YEAR
				05	03	96

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

On February 2, 1996, with Unit 2 operating at approximately 25% reactor power, a planned reactor manual scram was inserted to support the start of the Unit 2 B212R1 refueling outage. Subsequent review of the control rod scram time data revealed that the core average 5% insertion time was 0.387 seconds which exceeds the limit of 0.358 seconds specified in Technical Specification 3.1.3.3. This time was primarily skewed by the 5% insertion times of 10 control rods with insertion times ranging from 0.53 to 1.078 seconds. Additionally, 10 two-by-two control rod arrays exceeded the Technical Specification 3.1.3.4 limit for average scram insertion time. The apparent cause of the degraded control rod performance is believed to be natural aging of the control rod Hydraulic Control Unit Scram Solenoid Pilot Valve (SSPV) Buna-N diaphragms and possible pipe thread sealant intrusion on the SSPV diaphragms. Investigation into the cause of the diaphragm performance is in progress. The results of that investigation and associated corrective actions will be reported in a supplement to this voluntary LER.

Review of the Unit 2 scram insertion time data indicates that there was no operational safety significance associated with the measured core average 5% scram insertion time. The actions taken at the time of this event met the requirements of the Technical Specification and the degraded SSPV condition would not have prevented the fulfillment of the Control Rod Drive system safety function. Additional GE analysis determined that: (1) the impact of slower scram speed at the core average 5% insertion point does not present a substantial safety hazard and (2) increasing the core average 5% insertion time to 0.49 seconds results in a less than .01 increase in the Critical Power Ratio. Thus this event is not considered reportable in accordance with the requirements of 10 CFR 50.73; however, a voluntary report is being submitted because of the current generic issues involving SSPV diaphragms. Additionally, this event was reported to the industry in Operational Experience Report OE 7683 on February 13, 1996.

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
A supplement to LER 2-96-01 will be submitted to report the results of the investigation into the cause of the SSPV diaphragm performance.	05/03/96