CP&L

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

MAY 02 1997

SERIAL: BSEP 97-0205

10 CFR 50.73

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

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NO. 1
DOCKET NO. 50-325
LICENSE NO. DPR-71
VOLUNTARY LICENSEE EVENT REPORT 1-97-005

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.

Please refer any questions regarding this submittal to Mr. Keith Jury, Manager - Regulatory Affairs, at (910) 457-2783.

Sincerely,

William Levis
Director -- Site Operations
Brunswick Steam Electric Plant

SFT/sft

Enclosure
1. Voluntary Licensee Event Report

IE22

pc (with enclosures):

U. S. Nuclear Regulatory Commission
ATTN.: Mr. Luis A. Reyes, Regional Administrator
Atlanta Federal Center
61 Forsyth Street, SW, Suite 23T85
Atlanta, GA 30303

U. S. Nuclear Regulatory Commission
ATTN: Mr. C. A. Patterson, NRC Senior Resident Inspector
8470 River Road
Southport, NC 28461

U. S. Nuclear Regulatory Commission
ATTN.: Mr. David C. Trimble, Jr. (Mail Stop OWFN 14H22)
11555 Rockville Pike
Rockville, MD 20852-2738

The Honorable J. A. Sanford
Chairman - North Carolina Utilities Commission
P.O. Box 29510
Raleigh, NC 27626-0510

NRC FORM 366 (4-95) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104
EXPIRES 04/30/98

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-6 F33), 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)

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

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

TITLE (4)
Feedwater Flow Indication Discrepancy - Voluntary Report

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
										05000
04	02	97	97	-- 005 --	00	05	02	97	FACILITY NAME	DOCKET NUMBER
										05000

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)			
POWER LEVEL (10)	95	20.2201(b)	20.2203(a)(2)(v)	50.73(a)(2)(i)	50.73(a)(2)(viii)
		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
		20.2203(a)(2)(iii)	50.36(c)(1)	50.73(a)(2)(v)	Specify in Abstract below or in NRC Form 366A
		20.2203(a)(2)(iv)	50.36(c)(2)	50.73(a)(2)(vii)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
Steve Tabor, Senior Analyst - Licensing	(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		07	30	97

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

On April 2, 1997, with Unit 1 operating at 95% reactor power, while awaiting implementation of power uprate to 100% reactor power, the results of an ultrasonic flow test (UT) conducted on the Unit 1 Feedwater (FW) system flow venturi indicated that the Unit 1 FW system flow indication was potentially non-conservative by approximately 1.6%. The Unit 1 FW flow instruments were last calibrated in 1994; based upon rubidium tracer testing. The current UT results are inconsistent with the rubidium tracer test results. Based upon the UT results, there is the potential that Unit 1 has operated in excess of rated thermal power limits during past operation.

Following validation of the UT report, Unit 1 reactor power was reduced to 93%. Administrative controls were implemented to ensure core thermal power would not exceed 93% until the FW system flow instrumentation could be re-calibrated. On April 7, 1997, the Unit 1 FW flow instrumentation was re-calibrated based on the most conservative feedwater flow test results; the affected nuclear instrumentation was adjusted accordingly.

Research into the cause for the discrepancy between the rubidium tracer and UT test results is ongoing. An evaluation is in progress to establish the proper FW flow instrumentation calibration limits based on the most accurate test data. As a result of the discrepancy between the UT and rubidium tracer test results, this issue is being voluntarily reported due to the potential of Unit 1 having operated in excess of rated thermal power limits. A supplement to this LER will be submitted containing the results of the evaluations, including the resultant safety analyses.