NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Brunswick Steam Electric Plant Unit 1	0 5 0 0 0 3 2 5	1 OF 0 2

TITLE (4)

Automatic Isolations of the Unit 1 Reactor Core Isolation Cooling System

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 NAMES	DOCKET NUMBER(S)
										0 5 0 0 0
0 9	3 0	8 4	8 4	— 0 2 7	— 0 0	1 0	3 0	8 4		0 5 0 0 0

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)	1 0 0	20.402(b)	20.405(c)	X 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 (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		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
M. J. Pastva, Jr., Regulatory Technician	AREA CODE 9 1 9 — 4 5 7 — 9 5 2 1

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	B N	R T V	V 0 8 5	Yes							

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 9-30-84, at 0920 and 0926, the Unit 1 Reactor Core Isolation Cooling (RCIC) System automatically isolated due to actuation of the system A isolation logic RCIC Equipment Room temperature instrument, 1-E51-N602A. Deflected steam from a steam leak at RCIC System valve 1-E51-V20 caused localized high temperature conditions detected by N602A. At the time Unit 1 was operating at 100% power. These events were revealed to the operator through appropriate Control Room alarm annunciations. Following each event, the subject RCIC System isolation signals were reset.

At 1200, on 9-30-84, the RCIC System was isolated and placed under clearance for repairs to 1-E51-V20. Appropriate repairs to V20 were made and the RCIC System was returned to service on 9-30-84, at 2300. During the period the RCIC System was unavailable, the unit High Pressure Coolant Injection System was available to fulfill the RCIC System functions, if required.

Appropriate licensed personnel will review this report.

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Brunswick Steam Electric Plant Unit 1	0 5 0 0 0 3 2 5	8 4	— 0 2 7	— 0 0	0 2 OF 0 2

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

On September 30, 1984, at 0920 and 0926, the Unit 1 Reactor Core Isolation Cooling (RCIC) System isolated due to automatic closure of the system turbine steam supply primary containment inboard isolation valve 1-E51-F007. In each case, closure of F007 occurred due to initiation of the system A isolation logic resulting from actuation of the RCIC System Equipment Room Ambient High Temperature instrument 1-E51-TS-N602A. The events were revealed to the Unit 1 Control Operator through the RCIC System "Steam Leak Detection Ambient Temperature High" and "RCIC Isolation Trip Signal A Initiated" alarm annunciations on the Unit 1 Control Room Reactor Turbine Gauge Board. At the time of these events, Unit 1 was operating at 100 percent power. The automatic closure of F007 is a Group 5 primary containment isolation. Following each event, the RCIC System trip signal was manually reset.

In each case, the actuations of N602A, which has an instrument trip setpoint of 165° ± 6°F, resulted from localized temperature increases at the instrument's respective temperature-sensing element, 1-E51-TE-N023A. N023A sensed high temperature conditions when steam from a valve body-to-bonnet steam leak at RCIC System valve 1-E51-V20 was deflected into the immediate vicinity of the sensing element. 1-E51-V20 is the instrument inboard root isolation valve to the high level transmitter of the RCIC System turbine steam supply inlet drain pot. At the time, the steam leak was causing steam impingement of other RCIC System instrumentation, and attempts to decrease the size of the leak were unsuccessful.

Following the second event at 1200, the RCIC System was isolated and placed under plant equipment clearance to permit repair of the V20. Appropriate repairs were made to V20, Velan Model No. W4-274B-2TS. At 2300 on September 30, 1984, the RCIC System was returned to service. Appropriate licensed personnel will review this report to ensure their familiarity of the events.

During the period the RCIC System was unavailable due to repairs associated with 1-E51-V20, the unit High Pressure Coolant Injection System was available and capable of fulfilling the function of the RCIC System if so required.

CP&L

Carolina Power & Light Company

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

October 30, 1984

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SERIAL: BSEP/84-2221

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

BRUNSWICK STEAM ELECTRIC PLANT UNIT 1
DOCKET NO. 50-325
LICENSE NO. DPR-71
LICENSEE EVENT REPORT 1-84-27

Gentlemen:

In accordance with Title 10 to the Code of Federal Regulations, the enclosed Licensee Event Report is submitted. This report fulfills the requirement for a written report within thirty (30) days of a reportable occurrence and is in accordance with the format set forth in NUREG-1022, September 1983.

Very truly yours,

C. R. Dietz, General Manager
Brunswick Steam Electric Plant

MJP/sdl/LETSDL

Enclosure

cc: Mr. R. C. DeYoung
Mr. J. P. O'Reilly

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