

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) **Brunswick Steam Electric Plant Unit 2** DOCKET NUMBER (2) **0 5 0 0 0 3 1 2 4** PAGE (3) **1 OF 0 1 5**

TITLE (4) **Unit 2 Primary Containment Isolation Valve Problems Revealed Through Local Leak Rate Testing**

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 9	3 0	8 4	8 4	0 0 1	0 0	1 0	3 0	8 4			0 5 0 0 0
											0 5 0 0 0

OPERATING MODE (9) **5** THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more of the following) (11)

POWER LEVEL (10) <b>0 1 0 1 0</b>	20.402(b)	20.406(c)	50.73(a)(2)(iv)	73.71(b)
	20.406(a)(1)(i)	50.36(c)(1)	<input checked="" type="checkbox"/> 50.73(a)(2)(v)	73.71(c)
	20.406(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	20.406(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
	20.406(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
	20.406(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
<b>M. J. Pastva, Jr., Regulatory Technician</b>	AREA CODE <b>9 1 9</b> <b>4 5 7</b> - <b>9 5 2 1</b>

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS
X	S J	I S V	A 3 9 5	Yes	X	C E	I S V	A 3 9 5	Yes
X	C E	I S V	A 3 9 5	Yes	X	B O	I S V	A 3 9 5	Yes

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)  NO

EXPECTED SUBMISSION DATE (15)

MONTH	DAY	YEAR

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

On 3-30-84, local leak rate testing (LLRT) of Unit 2 primary containment isolation valves (PCIVs) revealed a nonquantifiable leakage rate for the unit reactor feedwater line B penetration X-9B. Subsequent LLRT of Unit 2 penetrations revealed nonquantifiable leakage rates on five other penetrations and a measured unacceptable leakage rate for an outboard PCIV. The subject problems were identified during the Unit 2 1984 refuel/maintenance outage.

The problems involved the valves' seat discs, O-rings, bellows, and a motor operator. The valves were repaired and returned to service. On 9-30-84, the LLRT was completed with a calculated primary containment leakage rate, as described in Technical Specification 3.6.1.2, of less than 0.60 L<sub>a</sub>.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

TEXT (If more space is required, use additional NRC Form 368A's) (17)

On March 30, 1984, local leak rate testing (LLRT) of Unit 2 primary containment isolation valves (PCIVs), in accordance with Periodic Test (PT) 20.3, revealed a nonquantifiable leakage rate for the unit reactor feedwater line B penetration X-9B. Subsequent Unit 2 LLRTs revealed nonquantifiable leakage rates on five other penetrations and a measured unacceptable leakage rate for a unit drywell pressure-sensing reactor instrumentation penetration (RIP) outboard PCIV. The subject testing was conducted during the Unit 2 1984 refueling/maintenance outage.

The subject LLRT problems involved the valves' seat discs, O-rings, bellows, and a valve motor operator. The valves were repaired, satisfactorily tested, and returned to service. The PT was completed on September 30, 1984. The combined leakage rate for the unit primary containment penetrations, as described by Technical Specification 3.6.1.2, was determined to be less than 0.60 L<sub>a</sub>. For more specific information pertaining to the Unit 2

LLRT-identified problems, see Table 1.

TABLE 1  
UNIT 2 LLRT-IDENTIFIED PCIV PROBLEMS

Primary Containment Penetration Number	Valve Number	Valve Function	Date Identified	Identified Leakage	Repairs Made	Post-repair Testing Date	Post-repair Leakage
X-9B	2-B21-F010B	Reactor feedwater line B inboard isolation check valve	3-28-84	*WNP	Valve disc machined and new soft seat installed	7-08-84	0 scfh
	2-G31-F039	Reactor Water Cleanup (RWCU) System inlet outboard isolation check valve to reactor feedwater line B	3-30-84	WNP	Valve replaced	8-19-84	1.75 scfh
	2-G31-F042	RWCU System inlet outboard isolation valve to reactor feedwater line B	5-06-84	WNP	Valve replaced	8-20-84	0 scfh

\*WNP - Would Not Pressurize

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

TABLE 1 (Cont'd)  
UNIT 2 LLRT-IDENTIFIED PCIV PROBLEMS

Primary Containment Penetration Number	Valve Number	Valve Function	Date Identified	Identified Leakage	Repairs Made	Post-repair Testing Date	Post-repair Leakage
X-225B	2-E11-F020B	RHR Subsystem B pumps 2B and 2D suction from suppression pool	3-30-84	*WNP	Lapped valve seat; machined valve disc	8-27-84	13.52 scfh
X-51B	2-E11-F043A	RIP outboard isolation to drywell pressure input to RHR System instrumentation	3-31-84	75.70 scfh	Replaced O-rings, valve disc, and bellows	8-24-84	0 scfh
X-225A	2-E11-F020A	Residual Heat Removal (RHR) Subsystem A pumps 2A and 2C suction from suppression pool	5-04-84	WNP	Repaired operator Belville spring pack; adjusted torque switch setting	7-30-84	0 scfh
X-77B	2-RXS-PV-1222B	Reactor Bldg. Closed Cooling Water (RBCCW) System sampling outboard isolation valve	5-19-84	WNP	Replaced O-rings, valve disc, and bellows	8-15-84	0 scfh
X-77C	2-RXS-PV-1222C	RBCCW System sampling outboard isolation valve	5-19-84	WNP	Replaced O-rings, valve disc, and bellows	8-15-84	0 scfh

\*WNP - Would Not Pressurize



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		8   4	-   0   0   1	-   0   0	0   5	OF	0   5

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

TABLE 1 (Cont'd)  
UNIT 2 LLRT-IDENTIFIED PCIV PROBLEMS

Primary Containment Penetration Number	Valve Number	Valve Function	Date Identified	Identified Leakage	Repairs Made	Post-repair Testing Date	Post-repair Leakage
X-206A	2-CAC-PV-1218C	Reactor instrumentation penetration (RIP) outboard isolation to suppression pool level instrumentation	8-14-84	*WNP	Replaced O-rings, valve disc, and bellows	9-02-84	0 scfh

\*WNP - Would Not Pressurize

# CP&L

Carolina Power & Light Company

Brunswick Steam Electric Plant  
P. O. Box 10429  
Southport, NC 28461-0429  
October 30, 1984

FILE: B09-13510C  
SERIAL: BSEP/84-2239

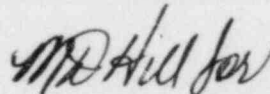
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BRUNSWICK STEAM ELECTRIC PLANT UNIT 2  
DOCKET NO. 50-324  
LICENSE NO. DPR-62  
LICENSEE EVENT REPORT 2-84-1

Gentlemen:

In accordance with Title 10 to the Code of Federal Regulations, the enclosed Licensee Event Report is submitted. In a letter dated April 13, 1984, Serial: BSEP/84-1035, it was conveyed that this report would be submitted within thirty (30) days following the completion of local leak rate testing of Unit 2 primary containment isolation valves, in accordance with PT-20.3. This report 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/clh/LETC1

Enclosure

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

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