



Carolina Power & Light Company

Brunswick Nuclear Project
P. O. Box 10429
Southport, N.C. 28461-0429

July 12, 1991

FILE: B09-13510C

10CFR50.73

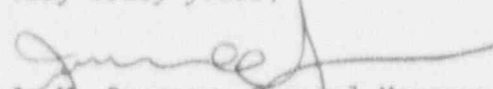
U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

BRUNSWICK STEAM ELECTRIC PLANT UNIT 1
DOCKET NO. 50-325
LICENSE NO. DRP-71
LICENSEE EVENT REPORT 1-91-015

Gentlemen:

In accordance with Title 10 of 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 submitted in accordance with the format set forth in NUREG-1022, September 1983.

Very truly yours,


J. W. Spencer, General Manager
Brunswick Nuclear Project

RK/

Enclosure

cc: Mr. S. D. Ebnetter
Mr. N. B. Le
BSEP NRC Resident Office

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LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Brunswick Steam Electric Plant Unit 1								DOCKET NUMBER (2) 05000325				PAGE (3) 1	
TITLE (4) TWO INOPERABLE CONTROL ROD ACCUMULATORS RESULT IN ENTRY INTO TECHNICAL SPECIFICATION 3.0.3													
EVENT DATE (5)			LER NUMBER (6)					REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQ. NO.	REV. NO.	MONTH	DAY	YEAR	FACILITY NAME		DOCKET NUMBER		
06	12	91	91	- 015 -	00	07	12	91					
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following): (11)											
1		20.402(b)		20.405(c)		50.73(a)(2)(iv)		73.71(b)					
POWER LEVEL (10)		20.405(a)(1)(i) 50.36(c)(1) 50.73(a)(2)(v) 73.71(c)											
100		20.405(a)(1)(ii)		50.36(c)(2)		50.73(a)(2)(vi)		OTHER (Specify in Abstract and Text)					
		20.405(a)(1)(iii)		X 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 Rhonda S. Knight, Regulatory Compliance Specialist										TELEPHONE NUMBER (919) 457-2174			
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)													
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC				
SUPPLEMENTAL REPORT EXPECTED (14)										EXPECTED SUBMISSION	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)										DATE (15)			
X NO													
ABSTRACT (Limit to 1400 spaces, i.e. approximately fifteen single space typewritten lines) (16) On June 12, 1991 at approximately 0451 hours (EDT), Unit 1 was operating at 100% power with one Control Rod Drive Hydraulic Control Unit inoperable due to maintenance, when the Control Room received a low nitrogen pressure alarm on another Hydraulic Control Unit making it inoperable. With two or more Control Rod Scram Accumulators inoperable, Technical Specifications 3.0.3 was invoked, placing the plant in a six hour to hot shutdown condition. An Auxiliary Operator was dispatched to recharge the accumulator with the low pressure. There was no intent to commence a unit shutdown unless problems were encountered during the recharging evolution. On June 12, 1991 at approximately 0531, the accumulator was successfully recharged and Technical Specification 3.0.3 was exited. The cause of this event is attributed to the simultaneous inoperability of two hydraulic Control Units (HCU). Corrective actions included recharging the HCU Accumulator with the low nitrogen pressure, completing repairs on the HCU with the nitrogen leak. The safety significance of this event is minimal. With the reactor vessel at full operating pressure and the scram discharge volume at atmospheric pressure, the accumulator is not needed to meet scram time requirements. Standby Liquid Control system was available as a backup to the Control Rod Drive Hydraulic Control Unit accumulators. A review of records revealed no similar events.													

**LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION**

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (5)				PAGE (3)
		YEAR	SEQ NO.		REV NO.	
Brunswick Steam Electric Plant Unit 1	05000325	91	015		00	2

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

INITIAL CONDITIONS

On June 12, 1991, Unit 1 was operating at 100% power steady state. Control Rod Drive (CRD) Hydraulic Control Unit (HCU) 30-19 was inoperable for repairs of a nitrogen leak at a pressure gauge connection. ECCS systems were operable.

EVENT NARRATIVE

On June 10, 1991 at 2149 hours (EDT) HCU 30-19 was declared inoperable due to a nitrogen leak on the pressure switch block at the gauge connection nut. A Work Request/Job Order was initiated to make repairs.

On June 12, 1991, at approximately 0451 hours (EDT), a second HCU (30-47) was declared inoperable due to Control Room receipt of a low nitrogen pressure alarm. There are 137 scram accumulators which consist of a water volume pressurized by nitrogen. Approximately once a week the nitrogen pressure in an accumulator bleeds down and requires recharging.

This event is reportable per 10CFR50.73(a)(2)(i)(B), operation outside of Technical Specifications. Brunswick Technical Specifications do not have an ACTION statement to address unit operation with more than one accumulator inoperable; therefore, the inoperability of the second HCU placed the unit in Technical Specification 3.0.3. An Auxiliary Operator was dispatched to recharge the accumulator with the intent not to commence a unit shutdown unless problems were encountered with the recharging evolution. At approximately 0531 hours (EDT), the accumulator 30-47 was successfully recharged.

After repairs were completed, the scram accumulator for HCU 30-19 was declared operable on June 13, 1991 at 0645 hours.

CAUSE OF EVENT

The cause of this event is attributed to the simultaneous inoperability of two Control Rod Drive Hydraulic Control Units.

CORRECTIVE ACTIONS

Corrective actions for this event included:

1. Recharging HCU 30-47 accumulator with nitrogen.
2. Completing repairs on HCU 30-19.
3. A Technical Specification change will be submitted.

SAFETY ASSESSMENT

The safety significance of this event is minimal. When the reactor vessel is at full operating pressure and the scram discharge volume is at atmospheric pressure, the scram force without an accumulator exceeds 1000 pounds pressure and the accumulator is not needed to meet the scram time requirements.

In this case, the lowest pressure reached by HCU 30-47 was 930 pounds. In the event of Loss of Offsite Power or a depressurized reactor, 930 pounds is sufficient pressure to insert the control rod; therefore, under reasonable and credible alternative conditions this event would not have been more severe. Standby Liquid Control system was available as a backup to Control Rod Drive Hydraulic Control units in this event.

EXPIRES: 4/30/92

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TEXT CONTINUATION**

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)				PAGE (3)
Brunswick Steam Electric Plant Unit 1	05000325	YEAR		SEQ NO.		3
		91		015	00	

TEXT (If more space is required, use additional NRC Form 365A's) (17)

PREVIOUS SIMILAR EVENTS

A review of records revealed no similar events.

EIIS COMPONENT IDENTIFICATIONSystem/ComponentEIIS Code

CONTROL ROD DRIVE	AA
HYDRAULIC CONTROL UNIT	AA/HCU
ACCUMULATOR	AA/HCU/ACC
STANDBY LIQUID CONTROL	BR