



Carolina Power & Light Company
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MAY 22 1995

SERIAL: BSEP-95-0237
10 CFR 50.73

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 1-95-006

Gentlemen:

In accordance with the Code of Federal Regulations, Title 10, Part 50.73, Carolina Power & Light Company submits the enclosed Licensee Event Report. 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.

Please refer any questions regarding this submittal to Mr. M. A. Turkal at (910) 457-3066.

Very truly yours,

J. Cowan, Director-Site Operations
Brunswick Nuclear Plant

SFT/

Enclosures

1. Licensee Event Report
2. Summary of Commitments

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

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EXPIRES: 5/31/95

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 INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), 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.

FACILITY NAME (1)

Brunswick Steam Electric Plant, Unit 1

DOCKET NUMBER (2)

05000325

PAGE (3)

1 of 4

TITLE (4)

Unplanned Containment Isolation Actuation Occurred During Vessel Level Restoration

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
04	24	95	95	- 06 -	00	05	22	95	FACILITY NAME	DOCKET NUMBER
										05000
										05000

OPERATING MODE (9)	05	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more of the following)(11)							
POWER LEVEL (10)	0	20.402(b)		20.405 ^c	<input checked="" type="checkbox"/>	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	
		20.405(a)(1)(iii)		50.73(a)(2)(i)		50.73(a)(2)(viii)(A)		(Specify in Abstract and Text)	
		20.405(a)(1)(iv)		50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)			
		20.405(a)(1)(v)		50.73(e)(2)(iii)		50.73(a)(2)(ix)			

LICENSEE CONTACT FOR THIS LER (12)

NAME

Steve F. Tabor, Regulatory Affairs Specialist

TELEPHONE NUMBER

(910) 457-2178

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)	X	NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

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

On April 24, 1995, at 0145 hours, with Unit 1 in the refuel mode and the reactor defueled, efforts were underway to restore Unit 1 system lineups following the completion of a reactor vessel draindown and reflood which had been performed to support the chemical decontamination of the reactor recirculation piping. During the removal of an electrical jumper previously installed to prevent an actuation of the 1-B21-LTM-N017D-1 reactor water level analog trip unit during vessel draindown, a Division II Group 2, 6, and 8 isolation signal was received. The isolation signal resulted in the closure of two Group 2 valves and eleven Group 6 valves. The remaining Group 2 and 6 valves and all the Group 8 valves were already in the closed position or controlled to support outage work activities. Investigation into the cause of the event determined that the inadvertent valve isolations occurred because the processes established to document changes to plant system/logic are not adequate during outage periods when higher numbers of work activities and abnormal system logic configurations occur. Following the valve isolations the proper logic actuations were verified and system components returned to the normal lineup position. Additional corrective action includes the establishment of a task force to review the existing controls for the monitoring of system logic status and determine/implement improvements as needed. This event has minimal safety significance in that the affected systems operated as designed and were restored immediately following the event. The cause classification per NUREG-1022 criteria is E due to a programmatic deficiency.

EXPIRES: 5/31/95

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

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		95	- 06 -	00	

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

TITLE

Unplanned Containment Isolation Actuation Occurred During Vessel Level Restoration

INITIAL CONDITIONS

On April 15, 1995, vessel draindown was initiated to support chemical decontamination of vessel components in accordance with Operations work procedure, 00WP-52/1, Reactor Vessel Water Level Control For Vessel Inspections and Chemical Decontamination of Recirculation Piping And Vessel Annulus. Analog trip unit cards had been pulled and electrical ring terminal jumpers installed within the analog trip units to prevent the actuation of Reactor Protection and Containment Isolation System logic during reactor vessel level draindown.

On April 22, 1995, clearance 1-95-00182 was established to support the planned replacement of instrument rack isolation valves for level instrument 1-B21-LT-N017D-3. To support this valve replacement reactor water level instrument 1-B21-LT-N017C-1 was declared inoperable due to shared instrument lines. Additionally, fuse C71A-F6C was removed under clearance to enforce procedural guidance for maintaining shutdown cooling instrumentation. By design the removal of the fuse causes a half isolation signal on Division II Primary Containment Isolation System (PCIS) logic.

On April 24, 1995, Unit 1 was in the refuel mode with the reactor defueled. The Unit 1 reactor vessel level had been restored to the normal flood level following vessel draindown which had been recently completed to support chemical decontamination of the reactor recirculation piping.

EVENT NARRATIVE

On April 23, 1995, following the start of nightshift, a Shift Supervisor (SS) conducted a review of the procedure used to draindown and reflood the vessel to identify remaining work and support the closeout of associated paperwork. Following this review the SS informed the Senior Reactor Operator (SRO) that the next step required by procedure involved inserting analog trip unit cards and removing jumpers installed within the analog trip units.

Utilizing shift turnover information and personal knowledge of plant conditions, the SRO determined that these steps could be performed under the current plant conditions. This determination was based on RPS and ECCS having jumpers installed to prevent actuations for other work and most of the PCIS valves were closed or out of service for other reasons.

At 2345 hours, a pre-job briefing was conducted by the Unit 1 SRO prior to the analog trip unit card installations and jumper removal. The SRO discussed the possibility of receiving half isolation or actuation signals due to possible momentary continuity losses while removing the jumpers from the analog trip unit terminals. To ensure full isolation logic actuations would not occur, the craft personnel attending the briefing were directed to contact the RO following each evolution to verify that any alarms and isolation/actuation signals had been properly reset prior to going to the next card/jumper. During the pre-job brief, the Reactor Operator (RO) raised a question concerning what affect the fuse pulled in accordance with clearance 1-95-00182 would

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

have on the jumper removal. After reviewing the special instructions for the clearance and discussing them with the SRO, the SS informed the RO that removing the jumpers should not be a problem.

On April 24, 1995, at approximately 0145 hours, while removing the jumper for reactor water level instrument 1-B21-LTM-N017D-1, a Division II Group 2, 6, and 8 isolation signal occurred resulting in the isolation of two Group 2 isolation valves and eleven Group 6 valves. The remaining Group 2 and 6 isolation valves and all the Group 8 valves were already closed or properly deactivated to support other work functions.

By 0153 hours, proper operation of the Group 2, 6, and 8 isolations was verified, the isolation signals were reset, and the affected valves were restored to their proper position. After verifying that the remaining steps of the vessel draindown procedure could be performed without additional actuations, the procedure was completed satisfactorily.

This event is being reported in accordance with the requirements of 10 CFR 50.73 (a) (2) (iv) in that a condition occurred which resulted in an automatic actuation of an engineered safety feature.

CAUSE OF EVENT

With a partial PCIS Division II isolation signal present due to the fuse pulled to support the 1-B21-LT-N017D-3 reactor water level transmitter maintenance, a Division II PCIS logic actuation and associated valve isolations occurred during the removal of the electrical jumper installed on the 1-B21-LTM-N017D-1 analog trip unit. During jumper removal a momentary loss of circuit continuity occurred which caused the logic actuations necessary to isolate the affected valves.

Investigation into the cause of the event determined that the inadvertent valve isolations occurred because the processes established to document changes to plant system/logic are not adequate during outage periods when higher numbers of work activities and abnormal system logic configurations occur.

CORRECTIVE ACTIONS

A task force will be established to review the existing controls for monitoring system logic status, determine needed improvements, and establish actions to complete identified improvements. This will be completed by September 29, 1995, to support the next refuel outage (B212R1) currently scheduled for February of 1996.

SAFETY ASSESSMENT

This event has minimal safety significance based on the plant conditions at the time of the event and because the affected systems operated as designed and were restored immediately following the event.

PREVIOUS SIMILAR EVENTS

A similar event involving an unplanned Engineered Safety Feature actuation due to a

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

programmatic deficiency was previously identified in LER 1-94-008.

EIIS COMPONENT IDENTIFICATION

System/Component

EIIS Code

Reactor Protection System
Primary Containment Isolation System
1-B21-LT-N017C-1
Engineered Safety Features Actuation System

JD
JM
AC/LT
JE

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
1. A task force will be established to review the existing controls for monitoring system logic status, determine needed improvements, and establish actions to complete identified improvements.	9/29/95