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SERIAL: BSEP 06-0082

10 CFR 50.73

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, DC 20555-0001

Subject: Brunswick Steam Electric Plant, Unit No. 1 Docket No. 50-325/License No. DPR-71 Licensee Event Report 1-2006-004

Ladies and Gentlemen:

In accordance with the Code of Federal Regulations, Title 10, Part 50.73, Carolina Power & Light Company, now doing business as Progress Energy Carolinas, Inc., submits the enclosed Licensee Event Report.

Please refer any questions regarding this submittal to Mr. Randy C. Ivey, Manager – Support Services, at (910) 457-2447.

Sincerely,

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B. C. Waldrep Plant General Manager Brunswick Steam Electric Plant

MAT/mat

Enclosure:

Licensee Event Report

Progress Energy Carolinas, Inc. Brunswick Nuclear Plant P.O. Box 10429 Southport, NC 28461

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Document Control Desk BSEP 06-0082 / Page 2

cc (with enclosure):

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U. S. Nuclear Regulatory Commission, Region II ATTN: Dr. William D. Travers, Regional Administrator Sam Nunn Atlanta Federal Center 61 Forsyth Street, SW, Suite 23T85 Atlanta, GA 30303-8931

U. S. Nuclear Regulatory Commission ATTN: Mr. Eugene M. DiPaolo, NRC Senior Resident Inspector 8470 River Road Southport, NC 28461-8869

U. S. Nuclear Regulatory Commission ATTN: Ms. Brenda L. Mozafari (Mail Stop OWFN 8G9) (Electronic Copy Only) 11555 Rockville Pike Rockville, MD 20852-2738

Ms. Jo A. Sanford Chair - North Carolina Utilities Commission P.O. Box 29510 Raleigh, NC 27626-051

NRC FORM 366 (6-2004) LICENSEE EVENT REPORT (LER) (See reverse for required number of digits/characters for each block)							SSION	APPROVED BY OMB NO. 3150-0104 EXPIRES 06/30/2007 Estimated burden per response to comply with this mandatory information collection requer 50 hours. Reported lessons learned are incorporated into the licensing process and fed back industry. Send comments regarding burden estimate to the Records and FOIA/Privacy Servic Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or 1 internet e-mail to <u>infocollects@nrc.gov</u> , and to the Desk Officer, Office of Information ar Regulatory Affairs, NEOB-1020 (3150-0104), Office of Management and Budget, Washingto DC 20503. If a means used to impose an information collection does not display a currently val OMB control number, the NRC may not conduct or sponsor, and a person is not required respond to the information collection.												
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ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On June 2, 2006, the Brunswick Steam Electric Plant received the results of as-found testing of 11 safety/relief valves (SRVs) which had been removed from Unit 1 during the spring 2006, refueling outage (i.e., B116R1). These results indicated that four of the 11 valves mechanically actuated at pressures outside of the 3 percent tolerance allowed by Technical Specification 3.4.3, "Safety/Relief Valves." Since Technical Specification 3.4.3 requires 10 of the 11 installed SRVs to be operable, this condition is being reported in accordance with 10 CFR 50.73(a)(2)(i)(B) as operation prohibited by the plant's Technical Specifications.

The root cause evaluation of this event has not been completed; pending disassembly and inspection of the SRVs which are being performed in August 2006. A supplement to this LER is planned.

The 11 SRV pilot valve assemblies were replaced with certified spares during the B116R1 refueling outage. Additional corrective actions, if necessary, will be established based on the root cause evaluation results.

## NRC FORM 366A U.S. NUCLEAR REGULATORY COMMISSION (1-2001) LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2)	Ĺ	ER NUMBER (6)	PAGE (3)	
Drungwick Stoom Electric Plant (DSED) Unit 1	05000325	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 05 3
Brunswick Steam Electric Flant (BSEF), Ont 1		2006	004	00	2 OF 5

NARRATIVE (If more space is required, use additional copies of NRC Form 366A) (17)

Energy Industry Identification System (EIIS) codes are identified in the text as [XX].

## **INTRODUCTION**

On June 2, 2006, the Brunswick Steam Electric Plant received the results of as-found testing of 11 safety/relief valves (SRVs) [SB/RV] which had been removed from Unit 1 during the spring 2006, refueling outage (i.e., B116R1). These results indicated that four of the 11 valves actuated at pressures outside of the 3 percent tolerance allowed by Technical Specification 3.4.3, "Safety/Relief Valves."

## **EVENT DESCRIPTION**

## Initial Conditions

At the time the condition was identified, Unit 1 was in Mode 1, at approximately 100 percent of rated thermal power.

#### Discussion

During the spring 2006, Unit 1 refueling outage, the 11 Model 7467F Target Rock Two-Stage pilot valve assemblies were replaced with certified spares. The removed SRVs were sent to NWS Technologies for set pressure testing. On June 2, 2006, Engineering personnel received the results of the as-found testing which indicated that four of the 11 valves actuated at pressures outside of the 3 percent tolerance allowed by Technical Specification 3.4.3. The test data is provided in the following table.

Valve Identification	As-Found (psig)	Technical Specification Setpoint (psig)	Percent Difference		
1-B21-F013B	1106	$1150 \pm 34.5$	-3.8%		
1-B21-F013F	1177	1130 ± 33.9	+4.2%		
1-B21-F013H	1184	$1140 \pm 34.2$	+3.9%		
1-B21-F013K	1184	$1140 \pm 34.2$	+3.9%		

Since Technical Specification 3.4.3 requires 10 of the 11 installed SRVs to be operable, this condition is being reported in accordance with 10 CFR 50.73(a)(2)(i)(B) as operation prohibited by the plant's Technical Specifications.

# NRC FORM 366A U.S. NUCLEAR REGULATORY COMMISSION

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2)	L	ER NUMBER (6)	PAGE (3)	
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NARRATIVE (If more space is required, use additional copies of NRC Form 366A) (17)

## EVENT CAUSE

The root cause evaluation of this event has not been completed; pending disassembly and inspection of the SRVs which are being performed in August 2006. A supplement to this LER is planned.

## SAFETY ASSESSMENT

The safety significance of this condition is considered minimal.

The as-found condition of the Unit 1 SRVs was compared to the current overpressure analysis prepared in support of extended power uprate and it was concluded that this analysis remained bounding. As such, the applicable acceptance criteria for design basis events would have been met and the SRVs remained capable of performing their intended safety function.

## **CORRECTIVE ACTIONS**

The 11 SRV pilot valve assemblies were replaced with certified spares during the B116R1 refueling outage. Additional corrective actions, if necessary, will be established based on the root cause evaluation results.

## PREVIOUS SIMILAR EVENTS

Target Rock SRV setpoint drift has been an industry issue since the early 1980s. The last reportable condition for BSEP occurred on Unit 2 and was reported in LER 2-1999-005, dated June 7, 1999, as supplemented on December 8, 1999.

## **COMMITMENTS**

No regulatory commitments are contained in this report.