



JUL 09 2003

10 CFR 50.46(a)(3)(ii)

SERIAL: BSEP 03-0107

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

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 AND 50-324/LICENSE NOS. DPR-71 AND DPR-62
ANNUAL REPORT OF CHANGES AND ERRORS IN EMERGENCY CORE COOLING
SYSTEM EVALUATION MODELS

Ladies and Gentlemen:

In accordance with 10 CFR 50.46(a)(3)(ii), Progress Energy Carolinas, Inc. is providing an annual report summarizing the effects of changes and errors in accepted loss-of-coolant accident (LOCA) Emergency Core Cooling System (ECCS) evaluation models applicable to the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2. 10 CFR 50.46(a)(3)(ii) specifies reporting requirements based on the sum of the absolute value of the changes and errors in calculated peak cladding temperature (PCT), including a requirement that, at least annually, the estimated effect of changes or errors on the limiting ECCS analysis be reported.

A summary of the effects of the currently reported LOCA analysis changes and errors for the GE13 and GE14 fuel types is enclosed. This summary includes changes and errors in the LOCA analysis for BSEP for the period ending May 6, 2003. The previous annual report, covering the period ending May 15, 2002, was submitted by letter dated July 10, 2002 (i.e., Serial: BSEP 02-0123, ADAMS Accession Number ML022040695).

Please refer any questions regarding this submittal to Mr. Leonard R. Beller, Supervisor - Licensing/Regulatory Programs, at (910) 457-2073.

Sincerely,

A handwritten signature in black ink, appearing to read 'E T O'Neil'.

Edward T. O'Neil
Manager - Support Services
Brunswick Steam Electric Plant

Document Control Desk
BSEP 03-0107 / Page 2

LU/lu

Enclosure: Update to Report of Loss-of-Coolant Accident (LOCA) Emergency Core
 Cooling System (ECCS) Evaluation Model Analysis Changes and Errors

cc (with enclosure):

U. S. Nuclear Regulatory Commission, Region II
ATTN: Mr. Luis A. Reyes, Regional Administrator
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23T85
Atlanta, GA 30303-8931

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

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

Ms. Jo A. Sanford
Chair - North Carolina Utilities Commission
P.O. Box 29510
Raleigh, NC 27626-0510

Update to Report of Loss-of-Coolant Accident (LOCA)
Emergency Core Cooling System (ECCS)
Evaluation Model Analysis Changes and Errors

Change or Error Notice	Notice or Document Date	Period Covered	Change or Error Description	GE BWR Estimated Licensing PCT Impact	Estimated BSEP Licensing PCT Impact and Estimated PCT		Cumulative BSEP Licensing PCT Change		Is BSEP Licensing PCT Change Greater than 50°F?	
					GE13	GE14	GE13	GE14	Incremental	Cumulative
10 CFR 50.46 Notice 2002-01	June 2002	through 5/02	SAFER Core Spray Injection Elevation Error	-95°F to +60°F for LBLOCA, SBLOCA up to +30°F	+5°F U1 < U2 <1722°F	+5°F U1 < U2 <1562°F	5°F	5°F	No	No
10 CFR 50.46 Notice 2002-02	June 2002	through 5/02	SAFER Bulk Water Level Error Impact on PCT	-5°F to +20°F	+10°F U1 < U2 <1732°F	+10°F U1 < U2 <1572°F	15°F	15°F	No	No
10 CFR 50.46 Notice 2002-03	August 2002	through 8/26/02	GESTR Input File Interpolation Error Impact on PCT	Negligible	0°F U1 < U2 <1732°F	0°F U1 < U2 <1572°F	15°F	15°F	No	No
10 CFR 50.46 Notice 2002-04	August 2002	through 8/26/02	SAFER04 Computer Platform Change Impact on PCT	Negligible	0°F U1 < U2 <1732°F	0°F U1 < U2 <1572°F	15°F	15°F	No	No
10 CFR 50.46 Notice 2002-05	August 2002	through 8/26/02	WEVOL S1 Volume Error Impact on PCT	Negligible	0°F U1 < U2 <1732°F	0°F U1 < U2 <1572°F	15°F	15°F	No	No
10 CFR 50.46 Notice 2003-01	May 2003	through 5/06/03	SAFER Level/Volume Table Error Impact on PCT	Generically not reported	0°F U1 < U2 <1732°F	-5°F U1 < U2 <1567°F	15°F	20°F	No	No
10 CFR 50.46 Notice 2003-03	May 2003	through 5/06/03	SAFER Initial Separator Pressure Drop Error Impact on PCT	Generically not reported	0°F U1 < U2 <1732°F	0°F U1 < U2 <1567°F	15°F	20°F	No	No