



**Progress Energy**

AUG 31 2005

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

SERIAL: BSEP 05-0110

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

Subject: 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 Emergency Core Cooling System Evaluation Model  
Changes and Errors

Reference: Letter from Edward T. O'Neil to the U.S. Nuclear Regulatory Commission,  
"Annual Report of Changes and Errors in Emergency Core Cooling System  
Evaluation Models," dated September 9, 2004 (ML042610122)

Ladies and Gentlemen:

In accordance with 10 CFR 50.46, "Acceptance criteria for emergency core cooling systems for light-water nuclear power reactors," paragraph (a)(3)(ii), Carolina Power & Light Company, now doing business as Progress Energy Carolinas, Inc. (PEC), is submitting the annual report of the emergency core cooling system (ECCS) evaluation model changes and errors for the Brunswick Steam Electric Plant, Unit Nos. 1 and 2.

This report covers the period from August 11, 2004, through July 31, 2005. The previous annual report for BSEP, Units 1 and 2, was submitted by PEC's letter dated September 9, 2004. Since the last annual report, no error or change notifications have been issued by Global Nuclear Fuels affecting the ECCS evaluation model for BSEP, Units 1 and 2; therefore, the estimated licensing basis peak cladding temperatures (PCTs) remain unchanged from the values reported in the September 9, 2004, letter (i.e., <1732°F for GE13 fuel and <1567°F for GE14 fuel).

No regulatory commitments are contained in this letter. Please refer any questions regarding this submittal to Mr. Leonard R. Beller, Supervisor - Licensing/Regulatory Programs, at (910) 457-2073.

Sincerely,

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

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