



Progress Energy

APR 25 2008

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

SERIAL: BSEP 08-0046

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
Unit 1 Cycle 17 10 CFR 50.46 Notification

References:

1. Letter from Randy C. Ivey (Progress Energy) to USNRC Document Control Desk, "Annual Report of Emergency Core Cooling System Evaluation Model Changes and Errors," September 11, 2007, ADAMS Accession Number ML072620146
2. Letter from Farideh E. Saba (USNRC) to Benjamin Waldrep, "Issuance of Amendments to Support Transition to AREVA Fuel and Methodologies," March 27, 2008, ADAMS Accession Number ML080870478

Ladies and Gentlemen:

The purpose of this letter is to provide an update to the previously submitted annual report of emergency core cooling system evaluation model changes and errors for the Brunswick Steam Electric Plant (BSEP), Unit 1. By letter dated September 11, 2007, Carolina Power & Light Company, now doing business as Progress Energy Carolinas, Inc., submitted an annual report of emergency core cooling system (ECCS) evaluation model changes and errors, as stipulated by 10 CFR 50.46(a)(3)(ii). The September 11, 2007, letter provided an estimated licensing basis peak cladding temperature (PCT) of $< 1567^{\circ}\text{F}$ for GE14 fuel.

With the issuance of Amendment No. 246 to the Renewed Operating License for BSEP, Unit 1, operation with AREVA-manufactured ATRIUM™-10 fuel assemblies has now been approved. As documented in AREVA Report ANP-2674(P), Revision 0, *Brunswick Unit 1 Cycle 17 Reload Safety Analysis*, which was submitted as part of CP&L's letter dated October 15, 2007, the ATRIUM™-10 licensing PCT is 1900°F .

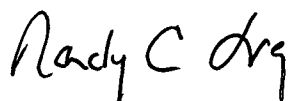
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Beginning with BSEP, Unit 1 Cycle 17 operation, GE14 and AREVA ATRIUM™-10 fuel types will be used. Accordingly, beginning with the next annual report, CP&L plans to provide information regarding ECCS evaluation model changes and errors for both the GE14 and ATRIUM™-10 fuel types.

No regulatory commitments are contained in this letter. Please refer any questions regarding this submittal to Mr. Gene Atkinson, Supervisor - Licensing/Regulatory Programs (Acting), at (910) 457-2056.

Sincerely,

A handwritten signature in black ink that reads "Randy C Ivey". The signature is written in a cursive, slightly slanted style.

Randy C. Ivey
Manager - Support Services
Brunswick Steam Electric Plant

WRM/wrm

cc: U. S. Nuclear Regulatory Commission, Region II
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