



Progress Energy

MAY 28 2004

**SERIAL: HNP-04-085
10 CFR 50.46**

**U. S. Nuclear Regulatory Commission
ATTENTION: Document Control Desk
Washington, DC 20555**

**SHEARON HARRIS NUCLEAR POWER PLANT
DOCKET NO. 50-400/LICENSE NO. NPF-63
EMERGENCY CORE COOLING SYSTEM EVALUATION CHANGES**

Ladies and Gentlemen:

The purpose of this letter is to submit information required by 10 CFR 50.46 for the Harris Nuclear Plant (HNP), of Carolina Power & Light Company (doing business as Progress Energy Carolinas, Inc.), concerning the effect of errors or changes in the application of the Emergency Core Cooling System (ECCS) evaluation models. This letter satisfies HNP's requirement for an annual report in accordance with 10 CFR 50.46(a)(3)(ii).

The HNP ECCS performance following a large break loss of coolant accident (LBLOCA) is calculated by HNP's fuel vendor, Framatome ANP, using the SEM/PWR-98 ECCS Evaluation Model for PWR LBLOCA Applications. The ECCS performance following a small break loss of coolant accident (SBLOCA) is calculated for HNP by Framatome ANP using the EXEM PWR Small Break Model.

In a letter dated June 4, 2003, HNP submitted a 30-day and annual report of the effect of changes in the ECCS evaluation models to the Nuclear Regulatory Commission. Since that submittal, no changes or errors were identified that affect the previously reported HNP SBLOCA or LBLOCA Peak Cladding Temperature (PCT) values. The PCT values remain predicted to be 2099°F for LBLOCA and 1712°F for SBLOCA.

Please refer any questions regarding this submittal to Mr. John Caves at (919) 362-3137.

Sincerely,

**B.C. McCabe
Supervisor, Licensing/Regulatory Programs (Acting)
Harris Nuclear Plant**

BCM/rgh

**c: Mr. R. A. Musser, NRC Sr. Resident Inspector
Mr. C. P. Patel, NRC Project Manager
Mr. L. A. Reyes, NRC Regional Administrator**

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