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U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

**Subject: 10 CFR 50.46 Report for the AP1000 Standard Plant Design
Shearon Harris Nuclear Power Plant Units 2 and 3
Docket Nos. 52-022 and 52-023**

Ladies and Gentlemen:

The purpose of this letter is to provide a required report in accordance with 10 CFR 50.46, "Acceptance Criteria for Emergency Core Cooling Systems for Light-Water Nuclear Power Reactors."

In a letter dated February 15, 2008, Westinghouse Electric Corporation (WEC) submitted a report to the NRC addressing a change in the calculated peak cladding temperatures. As indicated by WEC, a design certification holder is required to report such a change to the NRC in accordance with 10 CFR 50.46(a)(3). This same regulation requires a similar report from any combined operating license (COL) applicant if the applicant is also affected by the change. Progress Energy - Carolinas (PEC) submitted a combined operating license application (COLA) on February 18, 2008, for the proposed Shearon Harris Nuclear Power Plant Units 2 and 3. PEC's application incorporated by reference the AP1000 design certification document (DCD) and thus, also utilizes the peak cladding temperature calculations performed by WEC. As such, the WEC report is also applicable to the Shearon Harris Nuclear Power Plant Units 2 and 3 COLA.

Enclosure 2 of the WEC letter referenced above contains the proposed WEC reanalysis plan and schedule as discussed in 10 CFR 50.46. The WEC reanalysis will also be applicable to Shearon Harris Nuclear Power Plants units 2 and 3.

If you have any questions, or need additional information, please contact me at (919) 546-6992.

Sincerely,
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cc: U.S. NRC Office of Nuclear Reactor Regulation/NRLPO
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U.S. NRC Resident Inspector, SHNPP Unit 1
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