



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

February 6, 2009

Chris L Burton, Vice President
Shearon Harris Nuclear Power Plant
Carolina Power & Light Company
Post Office Box 165, Mail Zone 1
New Hill, North Carolina 27562-0165

SUBJECT: SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1 – ACCEPTANCE REVIEW REGARDING AMENDMENT TO REMOVE CREDIT FOR BORAFLEX IN BOILING WATER REACTOR SPENT FUEL POOL STORAGE RACKS (TAC NO. ME0012)

Dear Mr. Burton:

By letter dated September 29, 2008 (Agencywide Documents Access and Management System Accession No. ML082800410), Carolina Power & Light Company (the licensee), now doing business as Progress Energy Carolinas, Inc. (PEC), submitted a proposed amendment for the Shearon Harris Nuclear Power Plant, Unit 1 (HNP).

The proposed amendment would modify Technical Specification (TS) Sections 5.6.1.3.a and 5.6.1.3.b to incorporate the results of a new criticality analysis. Specifically, the TSs would be revised to add new requirements for the Boiling Water Reactor (BWR) spent fuel storage racks containing Boraflex in Spent Fuel Pools A and B. The requirements for the BWR spent fuel racks as currently contained in TS 5.6.1.3 would be revised to specify applicability to the spent fuel storage racks containing Boral in Spent Fuel Pool B.

The purpose of this letter is to provide the final results of the U.S. Nuclear Regulatory Commission (NRC) staff's acceptance review of this request. The acceptance review was performed to determine if there is sufficient technical information in scope and depth to allow the NRC staff to complete its detailed technical review and make an independent assessment regarding the acceptability of the proposed change. The acceptance review is also intended to identify whether the application has any readily apparent information insufficiencies in its characterization of the regulatory requirements or the licensing basis of the plant.

In a phone conference on December 17, 2008, as well as by letter dated January 27, 2009, (ADAMS Accession No. ML090210011), the NRC staff informed HNP that further information was necessary to enable the staff to make an independent assessment regarding acceptability of the proposed amendment in terms of regulatory requirements and the protection of public health and safety and the environment. Specifically, the January 27, 2009, letter stated that the HNP proposed amendment should be supplemented to provide clarifications of two potential errors in the submittal, as well as to expand the discussion and/or clarify sections of the criticality model, reference fuel design, axial burnup distribution, and the Boraflex Monitoring Program.

C. Burton

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The NRC staff requested that HNP supplement the application to address the necessary information by January 16, 2009. HNP fulfilled this request by letter dated January 16, 2009 (ADAMS Accession No. ML090230373). The NRC staff has reviewed the supplemental information and found that it adequately addresses the information requested by the January 27, 2009, letter. Accordingly, the NRC staff has concluded that the proposed amendment, as supplemented, is acceptable for review.

If additional information is needed for the staff to complete its technical review, you will be advised by separate correspondence. Should you have any questions regarding this review, please contact me at (301) 415-3178.

Sincerely,

A handwritten signature in black ink, appearing to read 'Marlayna Vaaler', written in a cursive style.

Marlayna Vaaler, Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-400

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C. Burton

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If additional information is needed for the staff to complete its technical review, you will be advised by separate correspondence. Should you have any questions regarding this review, please contact me at (301) 415-3178.

Sincerely,

/RA/

Marlayna Vaaler, Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-400

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