



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

August 20, 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 ALLOW THE USE OF THE THERMAL-HYDRAULIC COMPUTER ANALYSIS CODE, S-RELAP5 FOR NON-LOSS-OF-COOLANT ACCIDENT TRANSIENTS (TAC NO. ME1735)

Dear Mr. Burton:

By letter dated July 21, 2009 (Agencywide Documents Access and Management System Accession No. ML092150228), Carolina Power & Light Company (now doing business as Progress Energy Carolinas, Inc.), submitted a proposed amendment for the Shearon Harris Nuclear Power Plant, Unit 1 (HNP). The proposed amendment would revise Technical Specification Section 6.9.1.6 to add the U.S. Nuclear Regulatory Commission (NRC)-approved Topical Report (TR) EMF-23 10(P)(A), "SRP Chapter 15 Non-LOCA [Loss-of-Coolant] Methodology for Pressurized Water Reactors," to the Core Operating Limits Report methodologies list.

This change will allow the use of thermal-hydraulic computer analysis code, S-RELAP5 for Final Safety Analysis Report (FSAR) Chapter 15 non-LOCA transients in the HNP safety analyses. Topical Report EMF-23 10(P)(A), Revision 0, was approved by the NRC on May 11, 2001, for the application of the S-RELAP5 thermal-hydraulic computer analysis code to FSAR Chapter 15 non-LOCA transients. Revision 1 of TR EMF-23 10(P)(A), approved by the NRC on May 19, 2004, updated Section 5.6 of the topical report.

Consistent with Section 50.90 of Title 10 of the *Code of Federal Regulations* (10 CFR), an amendment to the license (including the technical specifications) must fully describe the changes requested, and follow, as far as applicable, the form prescribed for original applications. Section 50.34 of 10 CFR addresses the content of technical information required. This section stipulates that the submittal address the design and operating characteristics, unusual or novel design features, and principal safety considerations.

The purpose of this letter is to provide the final results of the 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.

The NRC staff has reviewed your application and concluded that it does provide technical information in sufficient detail to enable the staff to proceed with its detailed technical review and make an independent assessment regarding the acceptability of the proposed amendment in terms of regulatory requirements and the protection of public health and safety and the environment.

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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The NRC staff has reviewed your application and concluded that it does provide technical information in sufficient detail to enable the staff to proceed with its detailed technical review and make an independent assessment regarding the acceptability of the proposed amendment in terms of regulatory requirements and the protection of public health and safety and the environment.

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

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