



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

January 14, 2000

Mr. James Scarola, Vice President
Shearon Harris Nuclear Power Plant
Carolina Power & Light Company
Post Office Box 165, Mail Code: Zone 1
New Hill, North Carolina 27562-0165

SUBJECT: NRC STAFF'S EVALUATION OF THE SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1, INDIVIDUAL PLANT EXAMINATION OF EXTERNAL EVENTS (IPEEE) SUBMITTAL (TAC NO. M83627)

Dear Mr. Scarola:

On June 28, 1991, the NRC issued Generic Letter (GL) 88-20, Supplement 4, "Individual Plant Examination of External Events (IPEEE) for Severe Accident Vulnerabilities - Title 10 CFR 50.54(f)," requesting that each licensee perform an IPEEE to identify plant-specific vulnerabilities to severe accidents, and report the results to the NRC together with any licensee-determined improvements and corrective actions. By letter dated December 19, 1991, as supplemented on October 15, 1992, June 30, 1995, and December 16, 1998, Carolina Power & Light Company (CP&L) provided its response to GL 88-20, Supplement 4, for the Shearon Harris Nuclear Power Plant, Unit 1 (HNP).

The staff performed a screening review which examined the IPEEE results for their completeness and reasonableness considering the design and operation of the plant. On the basis of this review and further review by a senior review board (SRB), the staff concluded that the aspects of seismic; fires; and high winds, floods, transportation and other external events were adequately addressed. The SRB is comprised of representatives from the NRC's Offices of Research (RES) and Nuclear Reactor Regulation (NRR), and RES consultants (Sandia National Laboratories) with probabilistic risk assessment expertise for external events. The staff's review findings are summarized in the enclosed Staff Evaluation Report (SER), and the details of the findings of the contractors and staff appear in the Technical Evaluation Reports attached to the SER.

On the basis of the IPEEE review, the staff concludes that CP&L's IPEEE process is capable of identifying the most likely severe accidents and severe accident vulnerabilities and, therefore, that the HNP IPEEE has met the intent of Generic Letter 88-20, Supplement 4.

The following set of generic safety issues applicable to HNP were identified in GL 88-20, Supplement 4, and its associated guidance in NUREG-1407, "Procedural and Submittal Guidance," as needing to be addressed as part of the IPEEE:

- (1) Unresolved Safety Issue (USI) A-45, "Shutdown Decay Heat Removal Requirements;"
- (2) Generic Safety Issue (GSI) 57, "Effects of Fire Protection System Actuation on Safety-Related Equipment;"

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- (3) GSI-103, "Design for Probable Maximum Precipitation (PMP);"
- (4) GSI-131, "Potential Seismic Interaction Involving the Movable In-Core Flux Mapping System Used In Westinghouse Plants;" and
- (5) The Sandia Fire Risk Scoping Study (FRSS) issues.

Except for the FRSS issue of misdirected manual fire suppression, which is also part of GSI-148, "Smoke Control and Manual Fire-Fighting Effectiveness," all of the issues called out directly in GL 88-20, Supplement 4, and its associated guidance document, are considered resolved. The need for any additional assessment or actions related to the resolution of GSI-148 and its associated FRSS issue will be addressed by the NRC staff separately from the IPEEE program.

In addition, CP&L's IPEEE submittal contains some specific information that addresses the external event aspects of certain other generic issues: GSI-147, "Fire-Induced Alternate Shutdown/Control Room Panel Interactions" (also an FRSS issue) and GSI-172, "Multiple System Responses Program (MSRP)." As discussed in the enclosed SER, the staff also considers these issues resolved for HNP.

This completes our action with respect to TAC No. M83627. If you have any comments regarding the enclosed evaluation, please contact me at (301) 415-1373.

Sincerely,

Original signed by R.Laufer
 Richard J. Laufer, Project Manager, Section 2
 Project Directorate II
 Division of Licensing Project Management
 Office of Nuclear Reactor Regulation

Docket No. 50-400

Enclosure: As stated

cc w/encl: See next page

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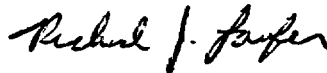
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Richard J. Laufer, Project Manager, Section 2
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