



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

January 11, 2000

Mr. Vaughn Wagoner, Chairman  
Utility Advisory Group, GL96-06 Waterhammer Resolution  
Carolina Power and Light Company  
411 S. Wilmington Street CPB 6A1  
Raleigh, NC 27601

SUBJECT: EPRI INTERIM REPORT TR-113594, "RESOLUTION OF GENERIC LETTER  
96-06 WATERHAMMER ISSUES"

Dear Mr. Wagoner:

I am responding to your letter of September 23, 1999, requesting NRC review and comment on Electric Power Research Institute (EPRI) Interim Report TR-113594, "Resolution of Generic Letter 96-06 Waterhammer Issues." The NRC staff has worked closely with industry participants on this initiative, and we are pleased with the work that has been done and with the progress that you have made. We are also very pleased with your use of an expert panel to help facilitate this effort.

While completing our review of the EPRI interim report, we were informed that the Advisory Committee on Reactor Safeguards (ACRS) Thermal-Hydraulic Phenomena Subcommittee was interested in the interim report and requested a briefing. Following the industry briefing that was completed on November 17, 1999, the Subcommittee presented its assessment to the ACRS full committee on December 3, 1999, and written comments were provided to the NRC staff in a memo from the ACRS dated December 22, 1999. We appreciate your cooperation and participation, and the cooperation and participation of others from the Utility Advisory Group and expert panel who were present, in briefing the ACRS Subcommittee and in responding to the questions that were raised.

Based on our review of EPRI Interim Report TR-113594, and based on the comments that we received from the ACRS Thermal-Hydraulic Phenomena Subcommittee, we believe that some additional work and refinement are necessary. While the interim report is a good first draft, we believe the formatting could be better structured for presenting the proposed approach for evaluating the Generic Letter 96-06 waterhammer concerns. We also believe that the specific limitations and criteria for applying the proposed methodology for evaluating the GL 96-06 waterhammer concerns are not described and/or defined well enough to assure conservative results, and a number of technical issues remain that have not been adequately addressed. In

Contact: James Tatum, SPLB/DSSA/NRR  
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Mr. Vaughn Wagoner

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order to assist you in pursuing this initiative, I have enclosed the comments that we received from the ACRS, as well as comments that we received from our Scientech consultant, and NRC staff comments. We are available to discuss these comments with you, and we remain optimistic that with some additional work and restructuring, an acceptable approach can be achieved.

Sincerely,

Original signed by:  
John N. Hannon, Chief  
Plant Systems Branch  
Division of Systems Safety and Analysis  
Office of Nuclear Reactor Regulation

Enclosures:

1. Memorandum to John N. Hannon from Howard J. Larson dated December 22, 1999, re: ACRS review of EPRI Interim Report TR-113594.
2. **[comments from Hossein]**
3. NRC staff comments re: EPRI Interim Report TR-113594.

cc: Dr. Avtar Singh  
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