



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

September 1, 1992

Docket No: 50-400

Mr. R. A. Watson
Senior Vice President
Nuclear Generation
Carolina Power & Light Company
P.O. Box 1551
Raleigh, North Carolina 27602

Dear Mr. Watson:

SUBJECT: SPECIAL TEAM INSPECTION AT SHEARON HARRIS NUCLEAR POWER
PLANT, UNIT 1 (REPORT NUMBER 50-400/92-201)

We are forwarding the report of the special team inspection conducted by the U.S. Nuclear Regulatory Commission's (NRC's) Office of Nuclear Reactor Regulation from August 3 through 7, 1992, at the Shearon Harris Nuclear Power Plant. The inspection was conducted to review the facts and circumstances regarding a reported loss of the high-head safety injection system as described in your Licensee Event Report 91-008. The inspection focused on the alternate minimum flow portion of the high-head safety injection (charging) system. Alternate minimum flow valves and piping were installed as a result of a 1980 Westinghouse 10 CFR Part 21 report, which identified the potential for dead heading the charging pumps under certain accident scenarios. The specific areas examined during the inspection are discussed in the enclosed inspection report. The results of the inspection were discussed with your staff during the exit meeting on August 7, 1992.

The team identified several significant concerns, both with the system design and with Carolina Power & Light's (CP&L's) performance. The team found that CP&L had not taken action to evaluate the integrity of the alternate minimum flow system piping or to evaluate the adequacy of this system's design after sustaining several water hammer events and severe piping and valve damage.

CP&L failed to implement its corrective action programs to document and evaluate water hammers in 1986, an inadvertent safety injection and water hammer in 1987, and a through-wall weld leakage in 1990. In addition, CP&L did not perform a thorough, complete evaluation after it discovered the severed piping and damaged relief valves in 1991.

Based on the team's findings, the staff issued a letter on August 14, 1992, requesting CP&L to take necessary actions to resolve the potential safety issues identified by the team. On August 20, 1992, you and members of your staff discussed the water hammer events and their impact on plant safety and continued operability of the high-head safety injection system with the NRC staff at NRC headquarters in Rockville, Maryland. The details of the meeting are not included in this report but do not change the team findings.

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Mr. R. A. Watson

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In accordance with 10 CFR 2.790(a), a copy of this letter and the enclosure will be placed in the NRC Public Document Room. Any enforcement actions resulting from this inspection will be issued by Region II under separate correspondence.

Should you have any questions concerning this inspection, please contact the NRR Project Manager, Ngoc B. (Tommy) Le or the Inspection Team Leader, Jeffrey Jacobson. Messrs. Le and Jacobson can be reached at (301) 504-1458 and (301) 504-2996, respectively.

Sincerely,

(ORIGINAL SIGNED BY)

Steven A. Varga, Director
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

Enclosure:
Inspection Report 50-400/92-201

cc: See next page

Distribution: See attached

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DATE	08/1/92	08/1/92			

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