

NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

October 10, 1989

Docket Nos. 50-325 and 50-324

Mr. Lynn W. Eury
Executive Vice President
Power Supply
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602

Dear Mr. Eury:

SUBJECT: REVIEW OF IGSCC INSPECTION PLAN AND REQUEST FOR WFLDS, BRUNSWICK

STEAM ELECTRIC PLANT, UNITS 1 AND 2 (TAC NO. 73434)

The staff has completed its review of your June 15 and August 21, 1989 submittals regarding the intergranular stress corrosion cracking (ISCCC) inspection plan that will be followed during the Unit 2 1989 refueling outage. Carolina Power & Light Company (CP&L) plans to inspect a total of 85 piping welds in the piping systems of recirculation, reactor water cleanup (RWCU), core spray, and jet pump instrumentation, and replace recirculation system risers, safe ends and nozzle butter, and portions of the RWCU system using conforming 316 stainless steel materials. Twenty eight of the forty one overlay repaired welds will be eliminated as a result of the Unit 2 piping replacement. Based upon our review, we conclude that the Unit 2 inspection plan meets the guidelines of Generic Letter 88-01, entitled "NRC Position on IGSCC in BWR Austenitic Stainless Steel Piping," and is acceptable.

In a related but separate matter, the staff has initiated a program to evaluate the effectiveness of weld overlay repair in mitigating IGSCC. One aspect of the program is to compare the ultrasonic testing result of overlayed cracked piping welds that have been in service for several fuel cycles with the results of metallurgical examinations. We have identified Unit 2 riser welds 12BRK2, 12BRJ2, 12BRJ3, and 12BRG4 and safe-end to nozzle weld 12ARE5 as candidate welds for metallurgical examination. We have also identified Unit 1 safe-end to nozzle weld 12ARE5 as candidate weld for a similar examination. The staff has contracted with Brookhaven National Laboratory (BNL) to conduct such examinations and BNL is licensed to handle radioactive and contaminated materials.

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The staff requests that CP&L consider providing the above specified welds for inclusion in BNL programs. Additional information regarding the program can be obtained from the BNL contact person, Mr. Carl Czajkowski, at 516-282-4420. CP&L's participation in the NRC/BNL program would be strictly voluntary.

Sincerely,

Original Signed By:

E. G. Tourigny, Senior Project Manager Project Directorate II-1 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

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PAnderson 10/4/89 Equirigny: sw 104,89 PD/1-1 EAdewsam 10/ 089 Mr. L. W. Eury Carolina Power & Light Company

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