



Carolina Power & Light Company

SERIAL: NLS-84-222

JUN 1 1984

Mr. Darrell G. Eisenhut, Director  
Division of Licensing  
United States Nuclear Regulatory Commission  
Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2  
DOCKET NOS. 50-325 & 50-324/LICENSE NOS. DPR-71 & DPR-62  
RESPONSE TO GENERIC LETTER 84-11  
INSPECTIONS TO BWR STAINLESS STEEL PIPING

Dear Mr. Eisenhut:

#### SUMMARY

In a letter dated April 19, 1984 to all boiling water reactor (BWR) licensees (Generic Letter 84-11), you outlined the Staff's current position concerning the issue of intergranular stress corrosion cracking (IGSCC) in large-diameter recirculation system and residual heat removal system piping. In addition, you requested that BWR operating reactor licensees provide their current plans relative to inspections for IGSCC and interim leakage detection. In response to this generic letter, Carolina Power & Light Company (CP&L) submits the following information regarding IGSCC inspections for the Brunswick Steam Electric Plant, Units 1 and 2.

#### DISCUSSION

##### Unit 1

In a letter dated February 27, 1984 (serial number NLS-84-087), CP&L submitted to the Staff the results of previous inspections performed on Brunswick-1. These inspections were performed in October 1983. The scope and schedule for planned Brunswick-1 inspections are given in our letters dated January 31, 1984 (serial number NLS-84-045) and February 27, 1984 (serial number NLS-84-081). These letters also describe the qualifications of examiners and the special surveillance measures in effect for reactor coolant system leakage detection.

##### Unit 2

Full scope inspections for intergranular stress corrosion cracking using the inspection performance criteria of IE Bulletin 83-02 were performed on Brunswick-2 in November 1983. The results of these inspections were submitted to the Staff by CP&L's letter dated November 28, 1983 (serial number BSEP/83-3748). The eleven welds that contained intergranular stress corrosion cracking indications that were not repaired were reinspected during the current Brunswick-2 refueling outage and a re-evaluation is in progress.

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Future Plans

Carolina Power & Light Company is considering a plan to replace recirculation system piping during the Brunswick-1 1985 refueling outage and the Brunswick-2 1986 refueling outage. Carolina Power & Light Company will notify the Staff of the plans for these outages by December 31, 1984. If CP&L does not replace recirculation system piping during the 1985 and 1986 outages, CP&L commits to the inspection plans discussed below.

Reinspections will be performed during the 1985 (Brunswick-1) and 1986 (Brunswick-2) refueling outages with the sample chosen in accordance with the criteria given in Generic Letter 84-11. The performance capability of level 2 and level 3 UT examiners performing evaluations will continue to be demonstrated in accordance with IE Bulletin 83-02. Level 1, 2, or 3 examiners performing operations other than evaluations (general scanning observations and discrete signal interpretation) will continue to be required to demonstrate their field performance capability. Examiners performing evaluations will be able to view the CRT display for the entire time the transducer is in contact with the pipe for scanning, either in real time, remotely, or on tapes. This meets the intent of Generic Letter 84-11 and makes the best use of the limited number of IE Bulletin 83-02 qualified inspectors.

The following special surveillance measures have been implemented at the Brunswick Plant:

1. Plant shutdown shall be initiated for inspection and corrective action shall be taken when any leakage detection system indicates, within any period of 24 hours, an increase in the rate of unidentified leakage in excess of 2 gpm or its equivalent, whichever occurs first. For sump level monitoring system with fixed-measurement interval method, the level shall be monitored at 4-hour intervals or less.
2. At least one of the leakage measurement instruments associated with each sump shall be operable, and the outage time for inoperable instruments shall be limited to 24 hours or an orderly shutdown will be immediately initiated.
3. A visual examination for leakage of the reactor coolant piping shall be performed during each plant outage in which the containment is deinerted. The examination shall be performed consistent with the requirements of IWA-5241 and IWA-5242 of the 1980 Edition of Section XI of the ASME Boiler and Pressure Vessel Code. The system boundary subject to this examination shall contain the susceptible welds inside the primary containment.

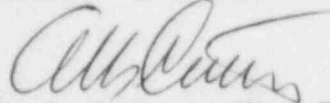
These measures are consistent with those given in Attachment 1 to Generic Letter 84-11 and with CP&L's ALARA program.

If cracks are discovered during future inspections on either unit, remedial measures will be taken in accordance with the criteria given in Attachment 2 to Generic Letter 84-11.

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If you need any additional information concerning this matter, please contact Mr. S. R. Zimmerman (telephone: 919/836-6242).

Yours very truly,

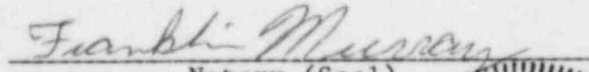


A. B. Cutter - Vice President  
Nuclear Engineering & Licensing

WRM/cfr (093WRM)

cc: Mr. D. O. Myers (NRC-BSEP)  
Mr. J. P. O'Reilly (NRC-RII)  
Mr. M. Grotenhuis (NRC)

A. B. Cutter, having been first duly sworn, did depose and say that the information contained herein is true and correct to the best of his information, knowledge and belief; and the sources of his information are officers, employees, contractors, and agents of Carolina Power & Light Company.

  
Notary (Seal)

My commission expires: OCT 04 1986

