

Carolina Power & Light Company

AUG 1 0 1984

SERIAL: NLS-84-358

Director of Nuclear Reactor Regulation Attention: Mr. D. B. Vassallo, Chief

Operating Reactors Branch No. 2

Division of Licensing United States Nuclear Regulatory Commission Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NO. 2 DOCKET NO. 50-324/LICENSE NO. DPR-62 INSPECTIONS OF BWR STAINLESS STEEL PIPE (IGSCC) JUSTIFICATION FOR CONTINUED OPERATION

Dear Mr. Vassallo:

SUMMARY

In a Confirmatory Order dated December 13, 1983, the NRC Staff required the submittal for review and approval of a justification for continued operation (JCO) for the Brunswick Steam Electric Plant, Unit No. 2 (Brunswick-2). The Order required the submittal of the JCO at least 30 days prior to plant start-up. Carolina Power & Light Company (CP&L) requests that you complete your review and approval of the Brunswick-2 JCO provided herein by September 10, 1984 in order to support the Brunswick-2 start-up schedule.

DISCUSSION

In a letter dated February 10, 1984 (Serial No. NLS-84-055), CP&L committed to reinspect and evaluate those Brunswick-2 welds that contained intergranular stress corrosion cracking (IGSCC) indications but which were not repaired during the November 1983 outage. The results of these Prunswick-2 inspections and analyses are provided in the enclosed report prepared by NUTECH Engineers. Table 1 of the report provides a list of those welds that were inspected during the outage currently in progress.

The performance capability of level 1, 2, or 3 ultrasonic (UT) examiners performing evaluations was demonstrated in accordance with IE Bulletin 83-02. Level 1, 2, or 3 UT examiners performing operations other than evaluations (general scanning observations and discrete signal interpretation) were required to demonstrate their field performance capability. Examiners performing evaluations were able to view the CRT display for the entire time that the transducer was in contact with the pipe for scanning, either in real time or remotely.

The NUTECH analysis report enclosed demonstrates that the welds are acceptable by the criteria given in Generic Letter 84-11 dated April 19, 1984. As stated in our June 1, 1984 response to Generic Letter 84-11, the following special surveillance measures have been implemented at the Brunswick Plant:

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

CONCLUSION

Carolina Power & Light Company believes that the analysis results and special surveillance measures described above provide adequate assurance that Brunswick-2 can be safely operated for an additional fuel cycle.

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

Yours very truly,

Sisa M. Randall Notary (Seal)

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

WRM/ccc (440WRM)

Enclosure

cc: Mr. D. O. Myers (NRC-BNP)

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.

My commission expires: 5/18/88