



Carolina Power & Light Company  
FEB 26 1985

SERIAL: NLS-85-045

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. 1  
DOCKET NO. 50-325/LICENSE NO. DPR-71  
IGSCC INSPECTIONS

Dear Mr. Vassallo:

In October 1984, Carolina Power & Light Company (CP&L) performed full scope inspections on Brunswick Unit 1 for intergranular stress corrosion cracking (IGSCC). These inspections were performed in accordance with NRC Generic Letter No. 84-11 dated April 19, 1984. The results of these inspections were submitted to you by our letter dated December 5, 1984 (Serial No. NLS-84-502). By letter dated December 6, 1984, the Staff requested that CP&L submit future inspection plans for Brunswick-1 30 days prior to the start of the next refueling outage. The purpose of this letter is to describe these inspection plans and mitigating actions that will be taken for Brunswick-1.

The following actions will be taken during the Brunswick-1 refueling outage scheduled to start on March 31, 1985:

1. The overlay repairs that were made prior to October 1984 will be re-inspected by ultrasound (UT). The weld overlays to be inspected are listed in Table 1.
2. Weld number 1-B32-RECIRC-28"-B-12 will be re-inspected and re-evaluated. This weld contains an IGSCC indication, but was not repaired.
3. The Inconel butter welds listed in Table 2 will be inspected. This is in accordance with recommendations given in IE Notice No. 84-41.
4. Induction Heating Stress Improvement (IHSI) will be performed on selected recirculation system and residual heat removal (RHR) system weld joints. Industry accepted methods will be utilized and the welds will be UT inspected after treatment. Joint selection will be based on accessibility, geometry, and IGSCC susceptibility.

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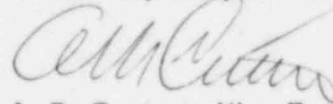
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5. The isolable portion of the Class I 6-inch reactor water cleanup (RWCU) system piping will be replaced with Nuclear Grade materials and long-term corrective action will be taken to fix the RWCU containment penetration.

Due to the short period of time Brunswick-1 will have operated between the October 1984 inspection outage and the upcoming refueling outage (less than four months), the Company does not intend to re-inspect the weld joints that did not have IGSCC indications or those joints that were repaired during the October 1984 outage. The results of the inspections described above, the specific scope of the IHSI program and a description of any further corrective actions will be submitted prior to Brunswick-1 start-up. The Company is continuing to assess the application of hydrogen water chemistry at Brunswick, as well as other IGSCC control measures.

Should you have any questions regarding this matter please contact Mr. Sherwood R. Zimmerman at (919) 836-6242.

Yours very truly,



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

RWS/ccc (1118NLU)

cc: Dr. J. Nelson Grace (NRC-RII)  
Mr. D. O. Myers (NRC-BNP)  
Mr. M. Grotenhuis (NRC)

TABLE 1

WELD OVERLAYS TO BE INSPECTED  
DURING MARCH 1985 OUTAGE

1-B32-12"-AR-E2	Riser Pipe to Elbow
1-B32-12"-BR-H4	Riser Pipe to Safe-end Extension
1-B32-28"-A-15	Discharge Elbow to Piping
1-B32-28"-A-14	Discharge Valve to Elbow
1-B32-28"-B-8	Valve to Elbow

TABLE 2

INCONEL BUTTER WELDS TO BE INSPECTED  
DURING MARCH 1985 OUTAGE

1-B32-RECIRC-28"-B-1	Nozzle to Safe-end	Inconel	Butter
1-B32-RECIRC-12"-AR-A-6	Nozzle to Safe-end	Inconel	Butter
1-B32-RECIRC-12"-AR-B-6	Nozzle to Safe-end	Inconel	Butter
1-B32-RECIRC-12"-AR-C-6	Nozzle to Safe-end	Inconel	Butter
1-B32-RECIRC-12"-AR-D-6	Nozzle to Safe-end	Inconel	Butter
1-B32-RECIRC-12"-BR-F-6	Nozzle to Safe-end	Inconel	Butter
1-B32-RECIRC-12"-BR-G-6	Nozzle to Safe-end	Inconel	Butter
1-B32-RECIRC-12"-BR-H-6	Nozzle to Safe-end	Inconel	Butter
1-B32-RECIRC-12"-BR-K-6	Nozzle to Safe-end	Inconel	Butter
1-B11-JPI-4"-N8B	Nozzle to Safe-end	Inconel	Butter