

ENCLOSURE 1

NOTICE OF VIOLATION

Carolina Power and Light Company
Brunswick

Docket No. 50-325
License No. DPR-71

The following violation was identified during an inspection conducted on November 13 - 16 and November 20 - 21, 1984. The Severity Level was assigned in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C).

Brunswick Unit 1 Technical Specification, Paragraph 6.8.1.c, requires that written procedures be established, implemented and maintained covering surveillance and test activities of safety-related equipment. 10 CFR 50, Appendix B, Criterion V requires activities affecting quality to be prescribed by documented...procedures...and accomplished in accordance with these procedures. General Electric Procedure UT 1.30, Revision 5, the applicable ultrasonic (UT) procedure Inservice Inspection (ISI) of stainless steel pipe welds, specifies the following:

Paragraph 5.5 states that "Angle beam wedges shall be used that will produce a sound beam at a nominal 45° in the examination medium. In those cases where complete coverage of the examination volume cannot be obtained, other angles may be used." Further, Paragraph 5.5.1 states, in part, "that when the examination is limited to the half-V examination, the distance from the center of the weld to the exit point of the transducer shall not be greater than 0.93T, for a 45° transducer to be used."

Paragraph 6.3.6.2 states, in part, that "when 1 1/2 V-Path calibration is used, the transducer shall be positioned on the applicable calibration standard and the response adjusted from the 6/8 (or 5/8) V-Path axial drilled hole to 80% FSH. Mark this point on the CRT screen. Without changing the gain, obtain the peak signal from the 10/8 (or 11/8) V-Path axial drilled hole and mark this point on the CRT screen. Draw a line connecting these two points and extrapolate to cover the entire examination volume. This DAC curve represents the primary reference level."

Paragraph 8.33 requires that indications determined to be geometric be recorded. When the amplitude of an indication exceeds 50% DAC, the indication shall be recorded. The indication shall be recorded as "continuous 360°" if it is discernible from the noise for the length of the weld. If the indication is not observed 360°, the end points shall be determined by the points at which the signal is discernible from the noise.

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Paragraph 9.2.1 requires that geometric plots be made of all recordable indications to show locations of indications with respect to the weld root.

Contrary to the above, UT inspection of Recirculation (RECIRC) system pipe welds was not performed in accordance with GE procedure UT 1.30 in that:

1. On several 28" RECIRC system welds with restrictive weld crown widths, 45°, 1/2 V-Path examinations were performed. The distance from the center of these welds to the exit point of the transducer was compared to the formulas listed in the procedure and the results revealed that a 60° transducer should have been used to obtain complete coverage of the volume under examination.
2. GE performed calibrations for 1/2 V-Path examinations using the technically correct side-drilled holes in the calibration standard in lieu of the axial-drilled holes as required by the procedure.
3. Indications were observed with GE equipment which exceeded 50% DAC and end points were readily discernible at the reference level. However, these indications were either not recorded or recorded incorrectly.

This is a Severity Level IV violation (Supplement I).

Pursuant to 10 CFR 2.201, you are required to submit to this office within 30 days of the date of this Notice, a written statement or explanation in reply, including: (1) admission or denial of the alleged violation; (2) the reasons for the violation if admitted; (3) the corrective steps which have been taken and the results achieved; (4) corrective steps which will be taken to avoid further violations; and (5) the date when full compliance will be achieved.

Security or safeguards information should be submitted as an enclosure to facilitate withholding it from public disclosure as required by 10 CFR 2.790(d) or 10 CFR 73.21.

Date: DEC 27 1984