



Carolina Power & Light Company
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OCT 05 1994

SERIAL: BSEP 94-0361
10 CFR 50.55a

U. S. Nuclear Regulatory Commission
ATTENTION: Document Control Desk
Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 AND 50-324/LICENSE NOS. DPR-71 AND DPR-62
ASME BOILER AND PRESSURE VESSEL CODE, SECTION XI
IN-SERVICE INSPECTION PROGRAM RELIEF REQUEST
USE OF ASME CODE CASE N-498-1

Gentlemen:

The purpose of this letter is to request relief from the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section XI, in accordance with 10 CFR 50.55a(g)(6)(i), for the Brunswick Steam Electric Plant, Units 1 and 2. CP&L requests permission to use the alternative requirements of ASME Code Case N-498-1 for alternate pressure testing for the 10-year hydrostatic tests on Class 3 systems.

The detailed request for relief is provided in Enclosure 1. Approval of this relief request is needed by March 1, 1995 in order to support planning activities for the upcoming Unit 1 refueling outage, which is currently scheduled to begin on April 1, 1995.

Carolina Power & Light Company considers this to be a Cost Beneficial Licensing Action with an approximate savings of \$720,000 over the life of the units.

Please refer any questions regarding this submittal to Mr. R. P. Lopriore at (910) 457-2212.

Sincerely,

R. P. Lopriore, Manager—Regulatory Affairs
Brunswick Nuclear Plant

WRM/wrm

Enclosure

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PDR ADOCK 05000324
Q PDR

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cc (with enclosure):

Mr. S. D. Ebner, Regional Administrator, Region II
Mr. P. D. Milano, NRR Senior Project Manager - Brunswick Units 1 and 2
Mr. C. A. Patterson, NRC Senior Resident Inspector - Brunswick Units 1 and 2
The Honorable H. Wells, Chairman - North Carolina Utilities Commission

ENCLOSURE 1

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 AND 50-324
OPERATING LICENSE NOS. DPR-71 AND DPR-62
IN-SERVICE INSPECTION PROGRAM — REQUEST FOR RELIEF
ASME BOILER AND PRESSURE VESSEL CODE, SECTION XI
USE OF ASME CODE CASE N-498-1

Unit:	1 and 2
Component:	Class 3 systems
System:	Service Water, Reactor Core Isolation Cooling, Fuel Pool Cooling Systems
Class:	3
Code Requirement:	The American Society of Mechanical Engineers (ASME) Code, Section XI, 1980 Edition through the 1981 Addenda, Table IWD-2500-1, Categories D-A, D-B, and D-C ten year system hydrostatic tests.
Proposed Alternative:	<p>CP&L has used American Society of Mechanical Engineers (ASME) Code Case N-498 for alternate pressure testing for the 10-year hydrostatic tests on Class 1 and Class 2 systems. Additionally, CP&L would like to use Code Case N-498-1 for alternate pressure testing for the 10-year hydrostatic tests on Class 3 systems.</p> <p>Code Case N-498-1 allows for alternate pressure testing to nominal operating pressure in lieu of elevated hydrostatic pressure.</p> <p>In addition to the alternate testing to Code Case N-498-1, CP&L performs the following examinations to ensure system integrity:</p> <ol style="list-style-type: none">1) Once per shift, all elevations of the Reactor Building, Turbine Building, and Service Water Building are walked down to identify leaks;2) Once per 7 days, the Service Water System piping in the Reactor Building (elevations 20 foot and 50 foot, including the pipe chases) and Turbine Building (elevation 38 foot) are walked down to identify leaks;3) Buried portions of Service Water System piping and open-ended Service Water System piping are being

monitored in accordance with the requirements of the ASME Code, Section XI.

- 4) The Service Water and Fuel Pool Cooling Systems are normally in service;
- 5) Reactor Core Isolation Cooling (RCIC) is pressurized to minimum pressure with keep-fill during normal operation; and
- 6) System Engineering and Operations personnel support Reactor Core Isolation Cooling quarterly periodic test performance.

Basis For The Proposed Alternative

As stated above, CP&L has already invoked Code Case N-498 for alternate pressure testing at nominal operating pressures in lieu of the 10-year hydrostatic pressures for Class 1 and Class 2 systems.

The hydrostatic testing for Class 3 components would require additional costs associated with ALARA, equipment, and personnel to perform these tests. The integrity of the Class 3 systems is verified by pressure testing at nominal operating pressures and additional surveillances and measures as detailed above.

The ASME Code, Section XI hydrostatic testing does not provide an increase in the level of quality or safety because integrity will be demonstrated by the ASME Code, Section XI nominal operating pressure testing in lieu of the ASME Code, Section XI hydrostatic testing.