



Carolina Power & Light Company  
P.O. Box 10429  
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SERIAL: BSEP 94-0363  
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  
HYDROSTATIC TESTING OF THE STANDBY GAS TREATMENT SYSTEM

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)(ii), for the Brunswick Steam Electric Plant, Units 1 and 2. CP&L requests permission to use alternative requirements of 10 CFR 50, Appendix J for performance of ten year system hydrostatic tests of Containment Atmosphere Control/ Standby Gas Treatment System piping required by the ASME Code, Section XI.

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 \$168,000 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  
PDR

AC47

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  
ASME BOILER AND PRESSURE VESSEL CODE, SECTION XI  
IN-SERVICE INSPECTION PROGRAM — REQUEST FOR RELIEF  
HYDROSTATIC TESTING OF THE STANDBY GAS TREATMENT SYSTEM

Unit:	1 and 2
Components:	Containment Atmosphere Control (CAC) - Standby Gas Treatment System (SGTS) piping
System:	Containment Atmosphere Control, Standby Gas Treatment System
Class:	2
Code Requirement:	The American Society of Mechanical Engineers (ASME) Code, Section XI, 1980 Edition through the 1981 Addenda, Table IWC-2500-1, Category C-H, 10-year system hydrostatic tests and 40-month functional tests.
Proposed Alternative:	As an alternate, components to the primary containment valves are tested per 10 CFR 50, Appendix J Type "C" local leak rate testing every outage. The components downstream of the primary containment isolation system valves are not tested.
Basis For The Proposed Alternative	The Containment Atmosphere Control/Standby Gas Treatment Systems are ASME Class 2 air systems from primary containment to downstream of the Standby Gas Treatment System filters. When Standby Gas Treatment System is in operation, the normal flow rate is about 2700 SCFM at a temperature of 80 - 100 degrees F. During normal operation, the Standby Gas Treatment System is in standby with the Reactor Building Ventilation providing a negative pressure in the Reactor Building. The purge portion of the system is used for the primary containment purging and de-inerting, primary containment is maintained between 0.15 - 1.25 psig. Brunswick is classified as a non-purge, pressurization (i.e., non-venting) plant for post-accident combustible gas control purposes. As a result, the Standby Gas Treatment System does not serve a post-accident function that will subject the system to accident pressure and temperature conditions that are significantly different from those encountered during routine operation (i.e., the system is dry and not subjected

to high temperatures and pressures). Therefore, the probability for system failure is remote.

The hydrostatic testing of the Containment Atmosphere Control/Standby Gas Treatment System imposes undue hardship for the following reasons:

The drywell purge is required to be isolated while performing this hydrostatic test. This creates harsh habitability conditions for workers in the drywell, including a confined space issue. Additionally, scheduling of work is impacted due to the drywell purge isolation. Scaffolding is required to be erected, impacting outage resources.

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 10 CFR 50, Appendix J testing in lieu of the ASME Code, Section XI testing. There have been no through-wall leaks identified to date. The components down stream of the primary containment isolation system valves normally operate at a negative pressure during accident conditions; therefore, any leakage would be expected into the system.