



Carolina Power & Light Company

SERIAL: NLS-85-374

OCT 25 1985
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
APPENDIX J EXEMPTION REQUEST

Dear Mr. Vassallo:

SUMMARY

Appendix J of 10CFR50 requires leak testing of the primary reactor containment and related systems and components penetrating the primary containment pressure boundary. Upon review of the Brunswick In-Service Inspection Program, we have determined that certain primary containment isolation valves currently receiving Type C testing do not require this testing. The purpose of this letter is to request an exemption from Type C testing requirements for these valves. This will eliminate both the unnecessary outage manpower and the man-rem exposure associated with the Type C testing. The following provides a description of the affected valves and justification for the exemptions:

Exemption 1 - Instrument Isolation Valves

An exemption from Appendix J Type C testing requirements is requested for the instrument isolation valves associated with the following penetrations:

<u>Pen No.</u>	<u>Function</u>
X-51D	Drywell Pressure Sensing Line
X-63D	Drywell Pressure Sensing Line
X-51C	Drywell Pressure Sensing Line
X-68A(C)	Drywell Pressure Sensing Line
X-51B	Drywell Pressure Sensing Line
X-68B	Drywell Pressure Sensing Line
X-51A	Drywell Pressure Sensing Line
X-68C(A)	Drywell Pressure Sensing Line
X-76C	Drywell Pressure Sensing Line
X-57D	Drywell Pressure Sensing Line
X-206B-B	Torus Pressure Sensing Line
X-206A-C	Torus Level
X-225B	Torus Level
X-206B-C	Torus Level
X-225A	Torus Level
X-206A-D	Torus Level
X-206C-D	Torus Level
X-206B-D	Torus Level
X-206D-D	Torus Level

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Justification - These instrument lines are connected to sealed transducers and are designed to withstand the stresses of a loss-of-coolant accident. Since they are required to be operable during normal operation, shutdown, and accidents in order to monitor critical parameters, they are considered a part of the containment barrier. The integrity of this barrier is ensured by exposing the lines to periodic Type A test pressure. Therefore, we believe these instrument lines do not require Type C testing.

Exemption 2 - Lines Terminating Below Minimum Torus Level

An exemption from Appendix J Type C testing requirements is requested for the isolation valves in penetrations where the line terminates below the surface of the minimum torus level. These penetrations include the following:

<u>Pen No.</u>	<u>Function</u>
X-210A/B	HPCI/RCIC/RHR Pump Test and Minimum Flow Line
X-225A/B	RHR Pump Suction
X-227A/B	Core Spray Pump Suction
X-223A/B	Core Spray Pump Test Line
X-224	RCIC Pump Suction
X-212	RCIC Turbine Exhaust
X-221	RCIC Barometric Condenser Drain
X-214	HPCI Turbine Exhaust
X-222	HPCI Turbine Drain Line
X-226	HPCI Pump Suction
X-231	Torus Drain Line

Justification - Appendix J requires local leakage rate testing of containment isolation valves in certain categories or systems identified in Sections II.H or III.A.1.(d). Section II.B defines containment isolation valves as those valves relied upon to perform a containment isolation function. The above-listed penetrations terminate below the minimum water level of the torus and do not communicate with the containment atmosphere; therefore, they cannot become a source of gaseous leakage at any time during the post-accident period because they are effectively water sealed by the liquid inventory of the torus. Consequently, these valves are not relied upon to perform a containment isolation function, and we believe their testing is not a requirement of Appendix J.

Exemption 3 - H₂ / O₂ Monitor Isolation Valves

An exemption from Appendix J Type C testing requirements is requested for the valves associated with the H₂/O₂ Monitors. The following penetrations provide the supply and return for these monitors:

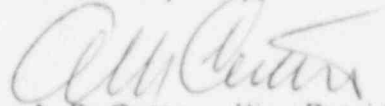
<u>Pen No.</u>	<u>Function</u>
X-57A	CAC-AT-4409 Supply
X-57B	CAC-AT-4409 Supply
X-60E	CAC-AT-4409 Supply
X-209B-A	CAC-AT-4409 Supply
X-245E	CAC-AT-4409 Return
X-73A	CAC-AT-4410 Supply
X-73B	CAC-AT-4410 Supply
X-73C(E)	CAC-AT-4410 Supply
X-206A-A	CAC-AT-4410 Supply
X-244B	CAC-AT-4410 Return

Justification - These small diameter (1/2" OD) instrument lines are connected to H₂/O₂ monitors CAC-AT-4409 and CAC-AT-4410 which are seismically designed and essential for post-accident monitoring of the containment and, therefore, do not require automatic isolation. However, automatic isolation is provided on a Group 6 isolation signal only for the purpose of instrumentation protection. In addition, the integrity of these lines and instruments is ensured by exposing them to periodic Type A test pressure. Since these valves are not required for containment isolation purposes, we believe these lines do not require Type C testing.

ADMINISTRATIVE INFORMATION

Carolina Power & Light Company has reviewed this request in accordance with 10CFR170.12 and determined that an application fee is required. A check for \$150 is enclosed in payment of this fee. In order to support the upcoming Brunswick-2 outage, we request your approval by November 30, 1985. Should you have any questions concerning this request, please contact Mr. Sherwood R. Zimmerman (919) 836-6242.

Yours very truly,



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

ABC/MAT/mf (2035MAT)

Enclosure

cc: Mr. W. H. Ruland (NRC-BNP)
Dr. J. Nelson Grace (NRC-RII)
Mr. M. Grotenhuis (NRC)