



Carolina Power & Light Company

SERIAL: NLS-84-194

MAY 7 1984

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 NOS. 1 AND 2
DOCKET NOS. 50-325 & 50-324/LICENSE NOS. DPR-71 & DPR-62
INTERIM REQUIREMENTS RELATED TO HYDROGEN
CONTROL AND CERTAIN DEGRADED CORE CONSIDERATIONS

Dear Mr. Vassallo:

SUMMARY

The purpose of this letter is to request an extension of an exemption from the schedule requirements of 10 CFR 50.44(c)(3)(ii) for the Brunswick Steam Electric Plant, Unit Nos. 1 and 2. The extension is being requested pending the Commission's ruling on Carolina Power & Light Company's (CP&L) request for a permanent exemption, previously submitted by our letters dated October 11, 1982 and March 16, 1983.

DISCUSSION

Section 50.44(c)(3)(ii) of 10 CFR Part 50 requires that by the end of the first scheduled outage after July 5, 1982 and of sufficient duration to permit required modifications, each light-water power reactor, that relies upon a purge/repressurization system as the primary means for controlling combustible gases following a loss-of-coolant accident, shall be provided with either an internal recombiner or the capability to install an external recombiner following the start of an accident.

By submittal dated October 11, 1982 and March 16, 1983, CP&L requested an exemption from the requirements of Section 50.44(c)(3)(ii) for provision of either an internal recombiner or the capability to install an external recombiner following the start of an accident. The latter submittal was a supplemental request based on a BWR Owners' Group study of combustible gas control submitted for NRC review by letter dated June 21, 1982. In the event that the NRC would be unable to promptly issue its decision on the request for exemption from the equipment requirements of 50.44(c)(3)(ii), CP&L requested an extension of the schedule requirements of 10 CFR 50.44(c)(3)(ii).

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Subsequently, on June 21, 1983, the NRC determined that pending its ruling on the request for a permanent exemption, an exemption from the schedule requirements was authorized by law and granted the following exemption:

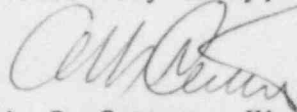
"Exemption is granted from the schedular requirement of Section 50.44(c)(3)(ii), to extend the required date from 'the end of the first scheduled outage beginning after July 5, 1982 and of sufficient duration to permit modifications' to no later than December 31, 1983, or, if the plant is shutdown on that date, before the resumption of operation thereafter."

By letter dated October 27, 1983, CP&L requested that an extension of the schedule exemption be granted until June 30, 1984. Subsequently, on December 29, 1983, the NRC determined that pending its ruling on the request for a permanent exemption, an extension of the schedule exemption until June 30, 1984 should be granted and extend the schedule accordingly. The NRC also stated in both exemption orders that the review of the BWR Owners' Group studies was "very nearly completed" and that the request for permanent exemption would be considered following that review. To date, the NRC has not ruled on CP&L's permanent exemption request. Therefore, CP&L again requests that an extension of the schedule exemption be granted until June 30, 1985.

With respect to combustible gas control in the interim period, in the unlikely event of a loss-of-coolant accident, the Brunswick units will use the existing containment atmosphere control systems in conjunction with the standby gas control systems to avoid unacceptable combustible gas concentrations. The containment atmosphere control system maintains an inert atmosphere during normal operation and the containment atmosphere dilution (CAD) system is used to control combustible gas concentrations after an accident. By means of the CAD system, hydrogen and oxygen concentrations are monitored as nitrogen is added to the containment atmosphere to dilute combustible gases. In the unlikely event of high containment pressure, the pressure may be relieved by venting through the standby gas treatment (SBGT) system. A detailed procedure has been developed by CP&L with operating personnel trained to use these systems in the control of combustible gases.

Should you have any questions concerning this letter, please do not hesitate to contact a member of our Licensing Staff.

Yours very truly,



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

WRM/ccc (9939WRM)

cc: Mr. S. J. Chilk (NRC)
Mr. D. O. Myers (NRC-BSEP)
Mr. J. P. O'Reilly (NRC-RII)
Mr. M. Grotenhuis (NRC)