



Carolina Power & Light Company

SERIAL: NLS-85-442

DEC 19 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 NOS. 1 AND 2
DOCKET NOS. 50-325 & 50-324/LICENSE NOS. DPR-71 & DPR-62
SUPPLEMENTAL RESPONSE TO GENERIC LETTER NO. 84-23
REACTOR VESSEL WATER LEVEL INSTRUMENTATION

Dear Mr. Vassallo:

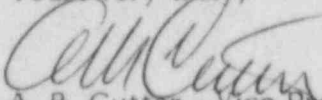
On December 10, 1984, Carolina Power & Light Company (CP&L) responded to Generic Letter No. 84-23. At that time, the Company committed to provide our planned improvements to reduce reactor vessel water level indication errors caused by high drywell temperature by December 31, 1985.

After investigating several options designed to reduce level indication errors, CP&L has elected to reduce the length of reference leg vertical drop in the drywell. This will be accomplished by installing two uncompensated condensing chambers in the drywell and routing the reference leg outside containment through a spare penetration. These instrument lines will replace the temperature compensated reference columns. The existing uncompensated reference legs and chambers will remain as presently installed. Should the drywell experience the postulated high temperatures associated with flashing, the new reference legs will be relied upon for reactor water level indication. The maximum level error expected is approximately 33 inches, a significant improvement over the existing design. In addition, this modification will provide the inadequate core cooling instrumentation required by NUREG-0737, Item II.F.2.

Carolina Power & Light Company will initiate implementation of this work during Reload 6 for Brunswick-1, presently scheduled for April 1989, and Reload 7 for Brunswick-2, presently scheduled for March 1988. Completion of the required modifications will be accomplished during subsequent refueling outages, if necessary. This completion schedule will be reflected in Schedule B of the Brunswick Long-Range Plan.

Please refer any questions regarding this matter to Mr. Sherwood R. Zimmerman at (919) 836-6242.

Yours very truly,


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

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ABC/MAT/crs (3100MAT)

cc: Mr. W. H. Ruland (NRC-BNP)
Dr. J. Nelson Grace (NRC-R11)
Mr. M. Grotenhuis (NRC)

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