

DEC 1 0 1984

SERIAL: NLS-84-333

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
REQUEST FOR LICENSE AMENDMENT
DC SYSTEM - LIMITING CONDITIONS FOR OPERATION AND
SURVEILLANCE REQUIREMENTS

Dear Mr. Vassallo:

SUMMARY

In accordance with the Code of Federal Regulations, Title 10, Parts 50.90 and 2.101, Carolina Power & Light Company (CP&L) hereby requests a revision to the Technical Specifications (TS) for the Brunswick Steam Electric Plant, Unit Nos. 1 and 2. The proposed revision involves an upgrading of TS Sections 3/4 8.2.3 and 3/4 8.2.4 to reflect the Brunswick DC system design and load profiles. Administrative changes have also been made to Section 3/4 8.2.5.

DISCUSSION

In November 1983, Battery 2A-2 failed a routine 18 month load profile surveillance test. Though the battery was successfully retested on December 31, 1983, an extensive review of the DC system design and the existing TS for the system was made to verify the adequacy of the design and the appropriateness of the surveillance program. This review included a detailed DC system load study and review of the GE/BWR-4 Standard Technical Specifications (STS). The results of these studies indicate that the existing Brunswick TS and GE/BWR-4 STS were designed for a unitized, fully separate, 125/250 Volt DC system. Certain circuits of the Brunswick 125 Volt DC system are shared between the two Brunswick units. As a result, some existing specifications were identified as being overly conservative while others could be revised to more readily identify degraded conditions and provide appropriate guidance to operators. The proposed TS pages of this request will more accurately reflect the existing plant design and ensure the 125/250 Volt DC system at Brunswick is fully tested within the design limits of the system. The guidance of the STS has been followed whenever possible, however deviations from that guidance were necessary in some instances. Detailed descriptions and the bases for the proposed changes are included in Attachments 1 and 2 with the proposed pages.

SIGNIFICANT HAZARDS ANALYSIS

Nearly all changes to TS Section 3/4 8.2 are more restrictive in nature, including the addition of TS Section 3/4 8.2.4.1 dealing with DC Distribution - Operation of One or Both Units. In two instances, the restrictions of the surveillance tests were reduced. The maximum ampacity

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value to which the batteries are tested in the 60 second load profile test (4.8.2.3.2.d.l.a) has been reduced to 916 amperes and the 8 hour load profile test (4.8.2.3.2.d.l.c) has been reduced to 4 hours. These changes do not significantly reduce the margin of safety and are justified based on the results of the detailed DC system load study performed for Brunswick.

Descriptions and bases for all changes are provided in Attachments 1 and 2. Carolina Power & Light Company believes that based on the results of the Brunswick DC system load study, the proposed amendment does not constitute a significant relaxation (i) of the criteria used to establish safety limits, (ii) of the bases for limiting safety system settings or limiting conditions for operation or (iii) in limiting conditions for operation not accompanied by compensatory changes, conditions, or actions that maintain a commensurate level of safety. Therefore, CP&L has determined that this amendment involves no significant hazards consideration.

ADMINISTRATIVE INFORMATION

The proposed Brunswick-1 and Brunswick-2 TS pages are included in Attachments 1 and 2. Also included are tables with a description and basis for each change.

Carolina Power & Light Company has evaluated this request in accordance with the provisions of 10 CFR 170.12 and determined that a license amendment application fee is required. A check for \$150.00 is enclosed in payment of this fee.

Should you have any questions concerning this submittal, please contact Mr. Sherwood R. Zimmerman (919) 836-6242.

Yours very truly,

Lisa M. Rardall

STREET RANDA

COUNTY COUNTY

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

MAT/ccc (382MAT)

Attachments

cc: Mr. Dayne H. Brown
Radiation Protection Branch
Division of Facility Services
Department of Human Resources

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

A. B. Cutter, having been first duly sworn, did depose and say that the information contained herein is true and correct to the best of his information, knowledge and belief; and the sources of his information are officers, employees, contractors, and agents of Carolina Power & Light Company.

My commission expires: 5/18/88