



**Carolina Power & Light Company**

P. O. Box 1551 • Raleigh, N. C. 27602

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R. A. WATSON  
Senior Vice President  
Nuclear Generation

United States 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  
BRUNSWICK ELECTRICAL DISTRIBUTION SYSTEM ENHANCEMENTS

Gentlemen:

The purpose of this letter is to formally communicate Carolina Power & Light Company's (CP&L) plans to enhance the electrical distribution system at the Brunswick Steam Electric Plant (BSEP). The planned enhancements were discussed in a meeting with the NRC staff on December 12, 1991.

As discussed in the December 12, 1991 meeting, CP&L plans to make several modifications to the off-site and on-site power distribution system at BSEP. The major features of the proposed modifications are summarized below:

Off-Site Power System

- Add one 25MVA 230/4.16 kV start-up transformer per unit.
- Add new voltage regulators to the 4160 V emergency bus feeds.
- Add new DC storage batteries for 230 kV switchyard control power.
- Upgrade the capacity of the secondary Y-winding, non-segregated bus duct of the existing start-up auxiliary transformers to 3000 amps.

On-Site Power System

- Add a new 4000kW non-class 1E diesel generator capable of feeding any one of the four existing E-busses.

These modifications to BSEP resolve NRC concerns related to GDC-17, resolve a number of current and potential future limitations of the electrical system, improve the overall reliability of both the off-site and on-site power systems and, consequently, improve overall plant safety. As discussed in the meeting, CP&L believes the magnitude of the safety improvement associated with the addition of the non-class 1E diesel generator justifies extending the allowed outage time for a class 1E emergency diesel generator from 7 days to 30 days with one unit shutdown. The extension of the allowed outage time would allow for more comprehensive and higher-quality maintenance, with a resulting overall improvement in reliability and availability of the emergency diesel generators.

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CP&L plans to install the electrical system modification during the Unit 1 refueling outage scheduled for early 1994 and the Unit 2 refueling outage scheduled for late 1994. The Company will notify the NRC of any changes to this planned schedule arising from the identification of higher-priority work.

We believe it would be mutually beneficial to have a joint meeting of our technical staffs in the first quarter of 1992 to review details of the design and identify the scope and content of required submittals to facilitate the NRC review process. Arrangements for the meeting will be coordinated through the NRC Project Manager.

CP&L appreciated the opportunity to brief the NRC on these issues and found the technical and policy discussions useful in finalizing our plans.

Yours very truly,



R. A. Watson

SDF/jbw (1442BNP.SDF)

cc: Mr. S. D. Ebnetter  
Mr. N. B. Le  
Mr. R. L. Prevatte