September 11, 1979

File: NG-3514(B) Serial No.: GD-79-2300

Office of Nuclear Reactor Regulation
ATTENTION: Mr. T. A. Ippolito, Chief
Operating Reactors Branch No. 3
United States Nuclear Regulatory Commission
Washington, D. C. 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-324 AND 50-325
LICENSE NOS. DPR-71 AND DPR-62
FIRE PROTECTION PROGRAM

Dear Mr. Ippolito:

In his letter of August 28, 1979, Mr. D. G. Eisenhut requested that we submit, on an expedited basis, any fire protection information that is outstanding with regard to required design details. As related in a conference call on August 31, 1979 between representatives of Carolina Power & Light Company (CP&L) and Mr. H. George of the NRC Fire Protection Review Team, CP&L has updated its fire protection design basis in two locations of the Brunswick Steam Electric Plant (BSEP) to account for the results of recent NRC sponsored cable fire tests conducted at Sandia Laboratories. Since these tests indicate that electrically initiated cable fires do not spread beyond the cable tray of origin in IEEE 383 qualified cable, and that cable coatings prevent the propagation of fire between cable trays, CP&L's concern has been redirected to center on the protection of cable from an exposure fire. An exposure fire might cause a cable fire to propagate between trays of unprotected IEEE 383 qualified cable or destroy cable integrity due to thermal breakdown. For these reasons, we have modified the design of the water suppression system in such a manner that an exposure fire at the floor level will be suppressed before it can damage cables in the immediate area. In the Service Water Building, Elevation +2', and the Diesel Generator Building, Elevation +2', sprinkler head locations are being modified to spray the general floor area to protect cable trays against an exposure fire. Sprinklers will be installed in conformance with NFPA 13 at the ceiling where feasible; however, where interferences or obstructions prevent effective spray patterns, sprinklers will be lowered and heat collectors utilized. In isolated cases, specific sprinkler heads and passive protection have been installed to protect cable and conduits where divisionalized cables cross or localized fire hazards exist.

CP&L feels that this revised design basis will provide fire protection for these cables which will be an improvement over the approach discussed previously with members of the NRC Fire Protection Review Team. CP&L requests

that your staff review these proposed improvements and notify us of your concurrence so that we may proceed with these modifications in an expeditious manner, in accordance with Mr. Eisenhut's letter of August 28, 1979.

Yours very truly,

E. E. Utley
Executive Vice President
Power Supply & Customer Services

EEU/tl