



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

OCT 15 1968

Peter A. Morris, Director
Division of Reactor Licensing

SAFETY ANALYSIS REPORT

Reference is made to the letter of August 12, 1968, from Roger S. Boyd, Assistant Director for Reactor Projects, DRL, to the Environmental Science Services Administration requesting comments on the following safety analysis report:

Frunswick Steam Electric Plant
Carolina Power and Light Company
Preliminary Safety Analysis Report
Volumes I, II, and III dated July 31, 1968

Review by the Air Resources Environmental Laboratory, ESSA, has now been completed and their comments are enclosed.

Milton Shaw
Milton Shaw, Director
Division of Reactor Development
and Technology

RDT:NS:S530

Enclosure:
Comments (Orig. and 1 Cy.)

cc: R. S. Boyd, Assistant Dir. for Reactor Projects, DRL

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Comments on

Brunswick Steam Electric Plant
Carolina Power and Light Company
Preliminary Safety Analysis Report
Volumes I, II and III dated July 31, 1968

Prepared by

Air Resources Environmental Laboratory
Environmental Science Services Administration
September 27, 1968

The Brunswick site does not appear to have any unusual aspects either in climate or topography that would require special consideration in a safety analysis. Stable atmospheric conditions occur about 30% of the time on an annual basis. The site is five miles from the Atlantic Ocean and any stable maritime flow would be quickly modified by overland travel.

The applicant's choice of meteorological conditions for both accidental ground and elevated releases is quite conservative. For example, it is highly improbable that the plume centerline would remain invariant over a 12-hour period. Although the building wake effect as used in the report amounts to a factor of 16 at 200 m, which we consider non-conservative, the effect at 600 m and 900 meters is a factor of 3 and 2, respectively, which agrees with available field data.

WIND TUNNEL INVESTIGATION

ATMOSPHERIC DISPERSION

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