



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

January 10, 1990

Docket Nos. 50-325
and 50-324

Mr. Lynn W. Eury
Executive Vice President
Power Supply
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602

Dear Mr. Eury:

SUBJECT: ANTICIPATED TRANSIENTS WITHOUT SCRAM (ATWS) ARI/RPT SYSTEM
POWER SUPPLY - BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2
(TAC NOS 73351/73352)

By letter dated October 23, 1989, you provided additional information to clarify the design of the ARI/RPT system power supply arrangement at the Brunswick Steam Electric Plant, Units 1 and 2. The staff has reviewed this submittal. As a result of this review, we have a better understanding of the Brunswick ARI/RPT system power supply design. However, in order to assure that common mode failures will not propagate through the power supplies and disable both the RTS and the ARI/RPT system, we request that you provide additional information to demonstrate that: (1) the "qualified isolators" (two fuses) have been properly sized to prevent fault propagation, and (2) that a common mode failure affecting the 125/250 VDC power distribution system (including degraded voltage and/or frequency conditions, i.e., overvoltage and undervoltage; the effects of degraded voltage/frequency conditions can go undetected) cannot compromise both the RTS and the ARI/RPT functions. If alarms are relied on to provide early detection of degraded voltage/frequency conditions, the information should include the specific alarm(s) and their setpoint values(s), and the limiting voltage/frequency values for which the affected circuits/components have been analyzed/demonstrated to still be capable of performing their intended functions.

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Mr. Lynn W. Eury

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January 10, 1990

You should provide the above requested information within 60 days of receipt of this letter. The reporting and/or recordkeeping requirements contained in this letter affect fewer than 10 respondents; therefore, OMB clearance is not required under P.L. 96-511.

Sincerely,

Original Signed By:

Ngoc B. Le, Project Manager
Project Directorate II-1
Division of Reactor Projects I/II

cc: See next page

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Mr. L. W. Eury
Carolina Power & Light Company

Brunswick Steam Electric Plant
Units 1 and 2

cc:

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