



Carolina Power & Light Company

P.O. Box 10429  
Southport, NC 28461

AUG 09 1993

ROY A. ANDERSON  
Vice President  
Brunswick Nuclear Plant

SERIAL: BSEP 93-0126  
10 CFR 50.90  
TSC 91TSB07

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 & 50-324/LICENSE NOS. DPR-71 & DPR-62  
RESPONSE TO NRC REQUEST FOR ADDITIONAL INFORMATION REGARDING SERVICE WATER  
SYSTEM LICENSE AMENDMENT REQUEST  
(NRC TAC NOS. M85466 & M85467)

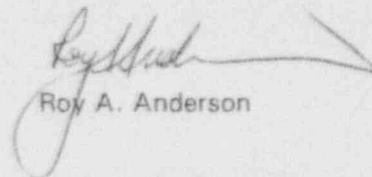
Gentlemen:

The purpose of this letter is to provide the NRC staff additional information requested by letter dated August 3, 1993, for Carolina Power & Light Company's (CP&L) Brunswick Steam Electric Plant, Units 1 and 2. This information involves the Service Water System license amendment request previously submitted to the NRC on December 31, 1992, as supplemented by letter dated July 20, 1993. Enclosure 1 provides a detailed description of the information requested by the NRC staff and CP&L's responses.

Carolina Power & Light Company is providing, in accordance with 10 CFR 50.91(b), Mr. Dayne H. Brown of the State of North Carolina with a copy of this letter.

Please refer any questions regarding this submittal to Mr. W. Levis at (919) 457-2404.

Yours very truly,



Roy A. Anderson

KAH/kah (bsep93126.wpf)

Enclosures.

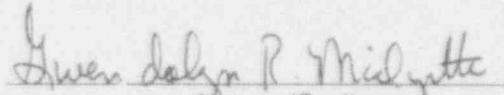
1. Response to NRC Staff Information Request
2. EER 91-0039, Evaluation of Service Water Design Basis Capability
3. EER 91-0450, Unit 2 Service Water Operability
4. 1-PT-24.6.4, Service Water System Hydraulic Performance Test
5. 2-PT-24.6.4, Service Water System Hydraulic Performance Test

160057

9308170116 930809  
PDR ADOCK 05090324  
P PDR

AD65 11

Roy A. Anderson, 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, .. agents of Carolina Power & Light Company.

  
Notary (Seal)

My commission expires: *August 12, 1996*

cc: Mr. Dayne H. Brown  
Mr. S. D. Ebnetter  
Mr. P. D. Milano  
Mr. R. L. Prevatte

ENCLOSURE 1

BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2  
NRC DOCKET NOS. 50-325 & 50-324  
OPERATING LICENSE NOS. DPR-71 & DPR-62  
REQUEST FOR LICENSE AMENDMENT  
SERVICE WATER SYSTEM

RESPONSE TO NRC STAFF INFORMATION REQUEST

NRC REQUEST NUMBER 1:

Carolina Power & Light Company, the licensee for Brunswick Steam Electric Plant, is requested to provide Engineering Evaluation Reports 91-0039 and 91-0450 that document the acceptability of the calibration of the Unit 1 and Unit 2 service water system computer models to test data. The licensee is also requested to provide the test procedure and most recent test results for Periodic Tests 1-PT-24.6.4 and 2-PT-24.6.4.

CP&L RESPONSE:

The items requested by the NRC staff are provided in Enclosures 2 through 5 of this letter.

NRC REQUEST NUMBER 2:

The licensee is requested to describe the basis for the allowance of operator action greater than ten minutes after the onset of a design basis accident. Remote operation from the control room should be addressed separately from local manual actuation.

CP&L RESPONSE:

The basis for allowance of operator action greater than ten minutes after the onset of a design basis accident is part of the original design basis of the Brunswick Plant. This basis was identified to the Atomic Energy Commission (AEC) staff in response to an AEC staff question during review of the original FSAR. The CP&L response to AEC Staff Comment 7.6 states, for the initial accident event, "The design basis of all engineered safety features to mitigate accident event condition takes into consideration that 'no operator action or assistance is allowed for the first ten (10) minutes of the event'. This requirement therefore makes it mandatory that all protective action necessary in the first ten minutes be 'automatic'. Therefore, although continuous tracking of process variables is available, no action based on them is required or recommended." The response to this comment further states that, for post-accident tracking, "After the first ten minutes operator action is optional based on the information available."

The rules for event analysis with respect to the design of the Brunswick Plant were provided to the AEC staff in Appendix G of the original FSAR. In Section G.3.4, Item 7 states that "Credit for operator action shall be taken on a case basis, depending on the conditions that would exist at the time operator action would be required. Because transients, accidents, and special events are considered through the entire duration of the event until planned operation is resumed, manual operation of certain systems is sometimes required following the more rapid portions of the event. Credit for operator action is taken only when the operator can reasonably be expected to

accomplish the required action under the existing conditions." This rule, as well as the ten-minute criteria, have been used in the analysis supporting this amendment (Calculation OSW-0048). For example, no manual operator action is credited inside the reactor building in this analysis because of the potential for habitability concerns associated with a postulated high energy line break. Remote operation from the control room following the first ten-minutes of an event would be allowed, since the operators could reasonably be expected to perform this function.

NRC REQUEST 3:

The licensee is requested to describe the current status of modifications to delete the minimum flow setpoints for service water valves 1(2)-SW-V103 and 1(2)-SW-V106.

CP&L RESPONSE:

Modifications to delete the minimum flow setpoints for service water valves 1(2)-SW-V103 and 1(2)-SW-V106 have been completed for both Unit 1 and Unit 2.