



Carolina Power & Light Company
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William R. Campbell
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January 22, 1997

SERIAL: BSEP 97-0033

U. S. Nuclear Regulatory Commission
ATTN: 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
AMENDMENT NOS. 183 AND 214
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION - POWER UPRATE
(NRC TAC NOS. M90644 / M90645)

Gentlemen:

On December 23, 1996, Carolina Power & Light Company (CP&L) provided information on findings associated with reviews of the power uprate analyses for Brunswick Steam Electric Plant, Units 1 and 2. This letter provides additional information related to Control Room personnel exposures resulting from a postulated Main Steam Line Break (MSLB) accident.

Carolina Power & Light Company has completed a calculation of control room doses following a postulated MSLB accident. CP&L believes that this calculation is consistent with applicable regulatory guidance, and that the results of our calculation indicate General Design Criterion 19 limits would not be exceeded following a MSLB accident. CP&L understands that the NRC staff has raised questions regarding certain assumptions and methodologies used in the CP&L calculation. Until we have reviewed and resolved these questions, CP&L will administratively limit the specific activity of the reactor coolant to less than or equal to 0.1 microcuries/gram dose equivalent I-131. Under this administrative limit, with the unit in Operational Conditions 1, 2, or 3 and dose equivalent I-131 greater than 0.1 microcuries/gram, the requirements of Technical Specification 3.4.5, Action a.2 (i.e., shutdown within 12 hours) will be followed. Upon resolution, CP&L will either eliminate the administrative limit or propose a change to Technical Specification 3/4.4.5, Specific Activity, to incorporate appropriate specific activity limits.

Additionally, CP&L has completed testing of the Control Room Emergency Ventilation (CREV) system filtration train charcoal adsorber units. The laboratory testing of the charcoal adsorber, using samples obtained as described in Regulatory Guide 1.52, Revision 1, Position C.6.b, showed methyl iodide penetration of less than 2.5%. The testing was performed in accordance with ASTM D3803-1989, at a temperature of $\leq 30^{\circ}\text{C}$, with a relative humidity of $\geq 95\%$. This testing demonstrates the capability of the Brunswick CREV filtration units to achieve in excess of 90% filtration efficiency under the environmental conditions noted above.

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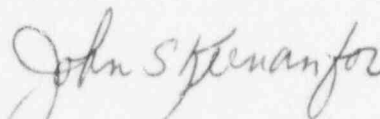
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CP&L is evaluating humidity control and the NRC staff questions on the MSLB calculation in conjunction with our assessment of Control Building Heating, Ventilation, and Air Conditioning system. CP&L will provide a status of these evaluations to the NRC staff by March 21, 1997.

Carolina Power & Light Company believes these actions resolve the outstanding issues associated with exceeding 95% rated thermal power on Unit 1. As such, CP&L requests approval to exceed 95% power and proceed with power uprate testing on Unit 1.

Please refer any questions regarding this submittal to Mr. Mark A. Turkal at (910) 457-3066.

Sincerely,



William R. Campbell

KAH/kah

Enclosure

pc: U. S. Nuclear Regulatory Commission
ATTN.: Mr. Luis A. Reyes, Regional Administrator
101 Marietta Street, N.W., Suite 2900
Atlanta, GA 30323-0199

Mr. C. A. Patterson
NRC Senior Resident Inspector - Brunswick Units 1 and 2:

U.S. Nuclear Regulatory Commission
ATTN.: Mr. David C. Trimble, Jr. (Mail Stop CWFN 14H22)
11555 Rockville Pike
Rockville, MD 20852-2738

The Honorable R. Hunt
Chairman (Acting) - North Carolina Utilities Commission
P.O. Box 29510
Raleigh, NC 27626-0510

ENCLOSURE 1

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
 NRC DOCKET NOS. 50-325 AND 50-324
 OPERATING LICENSE NOS. DPR-71 AND DPR-62
 AMENDMENT NOS. 183 AND 214
 (NRC TAC NOS. M90644 / M90645)

LIST OF REGULATORY COMMITMENTS

The following table identifies those actions committed to by Carolina Power & Light Company in this document. Any other actions discussed in the submittal represent intended or planned actions by Carolina Power & Light Company. They are described to the NRC for the NRC's information and are not regulatory commitments. Please notify the Manager-Regulatory Affairs at the Brunswick Nuclear Plant of any questions regarding this document or any associated regulatory commitments.

Commitments	Committed date or outage
<p>Until CP&L has reviewed and resolved NRC staff questions regarding our MSLB control room dose calculation, CP&L will administratively limit the specific activity of the reactor coolant to less than or equal to 0.1 microcuries/gram dose equivalent I-131. Upon resolution, CP&L will either eliminate the administrative limit or propose a change to Technical Specification 3/4.4.5, Specific Activity, to incorporate appropriate specific activity limits for I-131. Under this administrative limit, with the unit in Operational Conditions 1, 2, or 3 and dose equivalent I-131 greater than 0.1 microcuries/gram, the requirements of Technical Specification 3.4.5, Action a.2 will be followed.</p>	<p>N/A</p>
<p>CP&L is evaluating humidity control and the NRC staff questions on the MSLB calculation in conjunction with our assessment of Control Building Heating, Ventilation, and Air Conditioning system. CP&L will provide a status of these evaluations to the NRC staff by March 21, 1997.</p>	<p>03/21/97</p>