



Progress Energy

MAR 28 2006

SERIAL: BSEP 06-0034

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Subject: Brunswick Steam Electric Plant, Unit No. 1
Docket No. 50-325/License No. DPR-71
Unit 1 Cycle 16 Core Operating Limits Report, Supplemental Reload
Licensing Report, and Loss-of-Coolant Accident Analysis Report

Ladies and Gentlemen:

Carolina Power & Light Company, now doing business as Progress Energy Carolinas, Inc., herein submits the latest revision of the Core Operating Limits Report, Supplemental Reload Licensing Report, and Loss-of-Coolant Accident Analysis Report for the Brunswick Steam Electric Plant (BSEP), Unit No. 1.

Technical Specification 5.6.5.d requires that the Core Operating Limits Report be provided to the NRC, upon issuance, for each reload cycle. Enclosure 1 provides a copy of Brunswick Unit 1, Cycle 16 Core Operating Limits Report, dated March 2006.

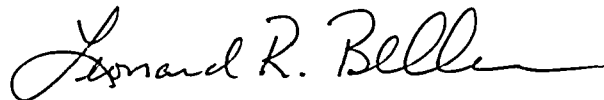
A copy of 0000-0038-9350-SRLR, Revision 0, Supplemental Reload Licensing Report for Brunswick Steam Electric Plant Unit 1 Reload 15 Cycle 16, dated December 2005, is provided in Enclosure 2. A copy of NEDC-31624P, Supplement 1, Revision 9, Loss-of-Coolant Accident Analysis Report for Brunswick Steam Electric Plant Unit 1 Reload 15 Cycle 16, dated December 2005, is provided in Enclosure 3.

Enclosure 3 contains information that Global Nuclear Fuel - Americas, LLC (GNF-A) considers to be proprietary as defined by 10 CFR 2.390. GNF-A, as the owner of the proprietary information, has executed the affidavit provided in Enclosure 4, which identifies that the enclosed proprietary information has been handled and classified as proprietary, is customarily held in confidence, and has been withheld from public disclosure. GNF-A requests that the enclosed proprietary information be withheld from public disclosure in accordance with the provisions of 10 CFR 2.390 and 9.17.

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Please refer any questions regarding this submittal to Mr. William R. Murray,
Licensing/Regulatory Programs, at (910) 457-2842.

Sincerely,



Leonard R. Beller
Acting Manager - Support Services
Brunswick Steam Electric Plant

WRM/wrm

Enclosures:

1. Brunswick Unit 1, Cycle 16 Core Operating Limits Report, March 2006
2. 0000-0038-9350-SRLR, Revision 0, Supplemental Reload Licensing Report for Brunswick Steam Electric Plant Unit 1 Reload 15 Cycle 16, December 2005
3. NEDC-31624P, Supplement 1, Revision 9, Loss-of-Coolant Accident Analysis Report for Brunswick Steam Electric Plant Unit 1 Reload 15 Cycle 16, December 2005 **(Proprietary Information - Withhold from Public Disclosure In Accordance With 10 CFR 2.390 and 10 CFR 9.17)**
4. Global Nuclear Fuels Affidavit Regarding Withholding NEDC-31624P, Supplement 1, Revision 9, From Public Disclosure

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cc (with enclosures):

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