



MAR 16 2001

SERIAL: BSEP 01-0029

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

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NO. 2  
DOCKET NO. 50-324/LICENSE NO. DPR-62  
TRANSMITTAL OF THE UNIT 2 CYCLE 15 CORE OPERATING LIMITS REPORT,  
SUPPLEMENTAL RELOAD LICENSING REPORT, LOSS-OF-COOLANT ACCIDENT  
ANALYSIS REPORT, AND SUPPLEMENT TO THE PLANT-SPECIFIC EMERGENCY  
CORE COOLING SYSTEM (ECCS) EVALUATION

Gentlemen:

The purpose of this letter is to submit the latest revisions of the Core Operating Limits Report, Supplemental Reload Licensing Report, and Loss-of-Coolant Accident Analysis Report for Carolina Power & Light (CP&L) Company's Brunswick Steam Electric Plant (BSEP), Unit No. 2. This letter also submits a supplement to the Emergency Core Cooling System (ECCS) evaluation model results for BSEP.

Technical Specification 5.6.5.d requires that the Core Operating Limits Report be provided to the NRC, upon issuance, for each reload cycle. A copy of "Brunswick Unit 2, Cycle 15 Core Operating Limits Report," Revision 0, dated March 2001, is provided in Enclosure 1. The NRC's Safety Evaluation for Amendment 19 to General Electric Licensing Topical Report NEDE-24011-P-A (i.e., GESTAR-II), "General Electric Standard Application For Reactor Fuel," states that the Technical Specifications will include, for each multiple lattice fuel bundle type, a plot of the limiting value of Average Planar Linear Heat Generation Rate (APLHGR) for the most limiting lattice as a function of exposure. Consistent with the guidance in NRC Generic Letter 88-16, "Removal of Cycle-Specific Parameter Limits From Technical Specifications," the limiting value of APLHGR for the most limiting lattice, as a function of exposure, has been relocated from the Technical Specifications to the Core Operating Limits Report. A plot of the limiting value of APLHGR, as a function of average planar exposure for each reload fuel type, is included in the enclosed Core Operating Limits Report.

The NRC's Safety Evaluation for Amendment 19 to GESTAR-II also states that each reload submittal should include a table of the most limiting and least limiting Maximum Planar Linear Heat Generation Rate (MAPLHGR) for each multiple lattice bundle type. A copy of "Supplemental Reload Licensing Report for Brunswick Steam Electric Plant Unit 2 Reload 14 Cycle 15," J11-03781SRLR, Revision 0, Class I, dated February 2001, is provided in Enclosure 2. The most limiting and least limiting MAPLHGR values for the

new reload fuel types are provided in a table included in the Supplemental Reload Licensing Report for BSEP, Unit 2.

The NRC's Safety Evaluation for Amendment 19 to GESTAR-II states that each licensee should submit to the NRC, on a proprietary basis, information for each bundle type on the axial location of each lattice in the bundle and composite MAPLHGR as a function of average exposure for each lattice in the bundle. A copy of "Loss-of-Coolant Accident Analysis Report for Brunswick Steam Electric Plant Unit 2 Reload 14 Cycle 15," NEDC-31624P, Supplement 2, Revision 7, Class III, dated February 2001, is provided in Enclosure 3. This report contains MAPLHGR as a function of exposure for each lattice of the fuel designs.

Global Nuclear Fuel considers the Loss-of-Coolant Accident Analysis Report in Enclosure 3 to be proprietary information. Therefore, the document should be withheld from public disclosure in accordance with 10 CFR 9.17 and 10 CFR 2.790. An affidavit supporting the request for withholding the document is provided in Enclosure 4.

By letter dated December 7, 2000 (Serial: BSEP 00-0165), CP&L submitted the results of a reanalysis of the limiting ECCS evaluation model for BSEP, Units 1 and 2. This letter stated that because GE7, GE8, GE9, and GE10 fuel types are no longer used in BSEP reactor cores, only results applicable to the GE13 fuel type are now considered the licensing basis for BSEP. Beginning with Cycle 15, the GE14 fuel type will be used for BSEP, Unit 2. Accordingly, CP&L is providing, in Enclosure 5, a copy of the "Brunswick Steam Electric Plant Units 1 and 2 ECCS-LOCA Evaluation for GE14," GE-NE-J1103781-09-02P, DRF J11-03781-09, Class III, dated February 2001.

General Electric Company considers the ECCS-LOCA Evaluation for GE14 in Enclosure 5 to be proprietary information. Therefore, the document should be withheld from public disclosure in accordance with 10 CFR 9.17 and 10 CFR 2.790. An affidavit supporting the request for withholding the document is provided in Enclosure 6.

There are no regulatory commitments being made in this submittal. Please refer any questions regarding this submittal to Mr. Leonard R. Beller, Supervisor - Licensing, at (910) 457-2073.

Sincerely,

A handwritten signature in black ink, appearing to read "David C. DiCello". The signature is fluid and cursive, with the first and last names being more prominent.

David C. DiCello  
Manager - Regulatory Affairs  
Brunswick Steam Electric Plant

WRM/wrm

Enclosures:

1. "Brunswick Unit 2, Cycle 15 Core Operating Limits Report," Revision 0, March 2001
2. "Supplemental Reload Licensing Report for Brunswick Steam Electric Plant Unit 2 Reload 14 Cycle 15," J11-03781SRLR, Revision 0, Class I, February 2001
3. "Loss-of-Coolant Accident Analysis Report for Brunswick Steam Electric Plant Unit 2 Reload 14 Cycle 15," NEDC-31624P, Supplement 2, Revision 7, Class III, February 2001
4. Global Nuclear Fuels Affidavit Regarding Withholding From Public Disclosure In Accordance With 10 CFR 2.790
5. "Brunswick Steam Electric Plant Units 1 and 2 ECCS-LOCA Evaluation for GE14," GE-NE-J1103781-09-02P, DRF J11-03781-09, Class III, February 2001
6. General Electric Company Affidavit Regarding Withholding From Public Disclosure In Accordance With 10 CFR 2.790

cc (with enclosures):

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cc (without enclosures):

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ENCLOSURE 1

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NO. 2  
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CORE OPERATING LIMITS REPORT,  
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AND SUPPLEMENT TO THE PLANT-SPECIFIC  
EMERGENCY CORE COOLING SYSTEM (ECCS) EVALUATION

"Brunswick Unit 2, Cycle 15  
Core Operating Limits Report,"  
Revision 0, March 2001