



**Progress Energy**

**FEB 07 2011**

SERIAL: BSEP 11-0021

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Director, Division of Spent Fuel Storage and Transportation  
Office of Material Safety and Safeguards  
Washington, DC 20555-0001

Subject: Brunswick Steam Electric Plant, Unit Nos. 1 and 2  
Renewed Facility Operating License Nos. DPR-71 and DPR-62  
Docket Nos. 50-325 and 50-324  
Independent Spent Fuel Storage Installation (ISFSI) Docket No. 72-006  
Registration and Use of Cask to Store Spent Fuel

Ladies and Gentlemen:

In accordance with 10 CFR 72.212(b)(1)(ii), Carolina Power & Light Company (CP&L), now doing business as Progress Energy Carolinas, Inc., is registering the use of an approved spent fuel storage cask at the Brunswick Steam Electric Plant (BSEP) ISFSI. Registration of the cask is required no later than 30 days after using that cask to store spent fuel. The required cask registration information is enclosed.

The General Requirements and Conditions of the Technical Specifications for Amendment No. 10 to Certificate of Compliance No. 1004, Section 1.1.7, "Special Requirements for First System in Place," also requires a 30-day notification of the results of a thermal performance assessment for the first cask system in place. This information is required for the dry storage canister (DSC) with the highest heat load. The highest heat load to date was DSC BNP-61BTH-2-F-1-HZ05, which was reported by CP&L's letter dated November 18, 2010 (i.e., ADAMS Accession Number ML103330167); therefore, a thermal performance assessment is not being provided for the cask being registered by this letter.

No regulatory commitments are contained in this letter. Please refer any questions regarding this submittal to Mr. Lee Grzeck, Acting Supervisor - Licensing/Regulatory Programs, at (910) 457-2487.

Sincerely,

Phyllis N. Mentel  
Manager - Support Services  
Brunswick Steam Electric Plant

NM5524

Document Control Desk  
BSEP 11-0021 / Page 2

WRM/wrm

Enclosure: Cask Registration Information Required by 10 CFR 72.212(b)(1)(ii)

cc (with enclosure):

U. S. Nuclear Regulatory Commission, Region II  
ATTN: Mr. Victor M. McCree, Regional Administrator  
245 Peachtree Center Ave, NE, Suite 1200  
Atlanta, GA 30303-1257

U. S. Nuclear Regulatory Commission  
ATTN: Mr. Philip B. O'Bryan, NRC Senior Resident Inspector  
8470 River Road  
Southport, NC 28461-8869

U. S. Nuclear Regulatory Commission **(Electronic Copy Only)**  
ATTN: Mrs. Farideh E. Saba (Mail Stop OWFN 8G9A)  
11555 Rockville Pike  
Rockville, MD 20852-2738

Chair - North Carolina Utilities Commission  
P.O. Box 29510  
Raleigh, NC 27626-0510

Mr. W. Lee Cox, III, Section Chief  
Radiation Protection Section  
North Carolina Department of Environment and Natural Resources  
1645 Mail Service Center  
Raleigh, NC 27699-1645

Cask Registration Information  
Required by 10 CFR 72.212(b)(1)(ii)

The following information is required by 10 CFR 72.212(b)(1)(ii), which states that the general licensee shall "Register use of each cask with the Nuclear Regulatory Commission no later than 30 days after using that cask to store spent fuel."

|  |   |
|--|---|
| Licensee Name  | Carolina Power & Light Company<br>(dba Progress Energy Carolinas, Inc.)                         |
| Licensee Address   | Progress Energy<br>Brunswick Steam Electric Plant<br>P.O. Box 10429<br>Southport, NC 28461-0429 |
| Reactor License Numbers  | DPR-71 (Unit 1)<br>DPR-62 (Unit 2)  |
| Reactor Docket Numbers   | 50-325 (Unit 1)<br>50-324 (Unit 2)  |
| Independent Spent Fuel Storage<br>Installation (ISFSI) Docket Number | 72-006  |
| Person Responsible for Providing<br>Additional Information           | Lee Grzeck<br>Acting Supervisor – Licensing/Regulatory Programs<br>(910) 457-2487               |
| Cask Certificate of Compliance Number                                | 1004  |
| Cask Model Number  | Type 2 NUHOMS <sup>®</sup> -61BTH   |
| Horizontal Storage Module (HSM)<br>Model Number / HSM Number         | HSM-H / 0-ISFSI-HSM-005   |
| Cask Identification Number   | BNP-61BTH-2-F-1-HZ02  |
| Service Date   | January 21, 2011  |