



10 CFR 72.212(b)(2)

March 13, 2013

Serial: BSEP 13-0034

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

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

In accordance with 10 CFR 72.212(b)(2), Carolina Power & Light Company (CP&L) is registering use of two approved spent fuel storage casks at the Brunswick Steam Electric Plant (BSEP) ISFSI. Registration of these casks is required no later than 30 days after using the casks 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-HZ08, which was reported by CP&L's letter dated February 24, 2011 (i.e., ADAMS Accession Number ML110670429); therefore, a thermal performance assessment is not being provided for the casks being registered by this letter.

This document contains no regulatory commitments.

Please refer any questions regarding this submittal to Mr. Lee Grzeck, Manager – Regulatory Affairs, at (910) 457-2487.

Sincerely,

A handwritten signature in black ink, appearing to read 'Annette H. Pope', with a stylized flourish at the end.

Annette H. Pope
Manager – Organizational Effectiveness
Brunswick Steam Electric Plant

NM5524
NM5526

WRM/wrm

Enclosure: Cask Registration Information Required by 10 CFR 72.212(b)(2)

cc (with enclosure):

U. S. Nuclear Regulatory Commission, Region II
ATTN: Mr. Victor M. McCree, Regional Administrator
245 Peachtree Center Ave, NE, Suite 1200
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U. S. Nuclear Regulatory Commission
ATTN: Ms. Michelle P. Catts, NRC Senior Resident Inspector
8470 River Road
Southport, NC 28461-8869

U. S. Nuclear Regulatory Commission
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Mr. W. Lee Cox, III, Section Chief
Radiation Protection Section
North Carolina Department of Health and Human Services
1645 Mail Service Center
Raleigh, NC 27699-1645

**Cask Registration Information
Required by 10 CFR 72.212(b)(2)**

The following information is required by 10 CFR 72.212(b)(2), 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
Licensee Address	Brunswick Steam Electric Plant P.O. Box 10429 Southport, NC 28461-0429
Reactor License Numbers	DPR-71 (Unit 1) DPR-62 (Unit 2)
Reactor Docket Numbers	50-325 (Unit 1) 50-324 (Unit 2)
Independent Spent Fuel Storage Installation (ISFSI) Docket Number	72-006
Person Responsible for Providing Additional Information	Lee Grzeck Manager – Regulatory Affairs (910) 457-2487
Cask Certificate of Compliance Number	1004, Amendment 10
Cask Model Number	Type 2 NUHOMS®-61BTH
Horizontal Storage Module (HSM) Model Number / HSM Number	HSM-H / 0-ISFSI-HSM-012 (for BNP-61BTH-2-F-1-HZ09) HSM-H / 0-ISFSI-HSM-011 (for BNP-61BTH-2-D-2-LT05)
Cask Identification Number	BNP-61BTH-2-F-1-HZ09 BNP-61BTH-2-D-2-LT05
Cask Heat Load	26.971 kW (BNP-61BTH-2-F-1-HZ09) 23.090 kW (BNP-61BTH-2-D-2-LT05)
Service Date	February 14, 2013 (BNP-61BTH-2-F-1-HZ09) February 20, 2013 (BNP-61BTH-2-D-2-LT05)