

Dominion Nuclear Connecticut, Inc.  
Millstone Power Station  
Rope Ferry Road  
Waterford, CT 06385



**Dominion**<sup>SM</sup>

NOV 15 2010

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

Serial No. 10-692  
MPS Lic/TGC R0  
Docket No. 72-47  
50-336  
DPR-65

**DOMINION NUCLEAR CONNECTICUT, INC.**  
**MILLSTONE POWER STATION UNIT 2**  
**INDEPENDENT SPENT FUEL STORAGE INSTALLATION (ISFSI)**  
**SUBMITTAL OF CASK REGISTRATION FOR SPENT FUEL STORAGE**

Pursuant to 10 CFR 72.212, "Conditions of general license issued under §72.210," paragraph (b)(1)(ii), Dominion Nuclear Connecticut, Inc. (DNC) hereby provides the Nuclear Regulatory Commission (NRC) notification regarding the registration of spent fuel storage casks approved under NRC Certificate of Compliance No. 1004. The required registration information is submitted within 30 days of loading. The information required per 10 CFR 72.212(b)(1)(ii) is provided as follows:

Licensee Name:	Dominion Nuclear Connecticut, Inc.
Licensee Address:	Rope Ferry Road Waterford, CT 06385
Reactor License No.:	DPR-65
Reactor Docket No.:	50-336
Cask Certificate No.:	1004
Cask Model No.:	NUHOMS <sup>®</sup> -32PT DSC Canister
Cask Identification Nos.:	
MPS 32PT-S100-A-HZ013	Initial Use: October 14, 2010
MPS 32PT-S100-A-HZ014	Initial Use: October 22, 2010
MPS 32PT-S100-A-HZ012	Initial Use: October 28, 2010

The above named casks are in use under Amendment 9 of Certificate of Compliance No. 1004.

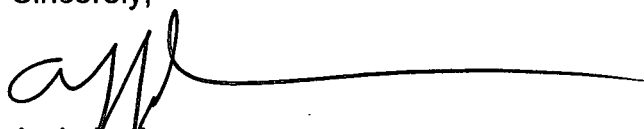
In addition, pursuant to the General Requirements and Conditions of the Technical Specifications for Certificate of Compliance No. 1004, Amendment 9, Paragraph 1.1.7, "Special Requirements for First System in Place," a summary of the thermal performance of the highest heat load Standardized NUHOMS<sup>®</sup>-32PT Dry Shielded Canister (DSC) placed in service at the Millstone Power Station ISFSI is provided.

N145524

MPS 32PT-S100-A-HZ013 was loaded with Millstone Power Station Unit 2 spent fuel and stored in a NUHOMS® Model 152 Horizontal Storage Module (HSM). The calculated thermal loading for this DSC is approximately 15.4 kW, which is the highest heat loading at Millstone Power Station to date. The inlet and outlet air temperatures for the HSM were measured consistent with the method provided in Certificate No. 1004 Technical Specification 1.2.8. Upon obtaining equilibrium conditions, the measured inlet air temperature was 45 degrees F and measured outlet air temperature was 102 degrees F, corresponding to a temperature difference of 57 degrees F. This temperature difference is within the expected thermal performance temperature differential of 64 degrees F calculated for a Model 152 HSM containing a DSC with a thermal loading of 15.4 kW at the given ambient conditions. This expected thermal performance temperature differential for the Model 152 HSM was established in Reference 1 using the methodology described in Reference 2.

Should there be any questions regarding this submittal or additional information required regarding spent fuel storage under the general license requirements of 10 CFR 72 Subpart K, please contact Mr. William D. Bartron (860) 444-4301.

Sincerely,



A. J. Jordan  
Site Vice President – Millstone

Attachments: None

Commitments made in this letter: None

References:

1. Transnuclear Calculation NUH004.0431, Revision 0, "HSM Model 152 Thermal Performance Analysis in Support of 72.48 Evaluation," dated September 21, 2004.
2. Transnuclear, Inc. Updated Final Safety Analysis Report (UFSAR) for the Standardized NUHOMS® Horizontal Modular Storage System for Irradiated Nuclear Fuel, NUH-003, Revision 11.

cc: U.S. Nuclear Regulatory Commission  
Region I Regional Administrator  
475 Allendale Road  
King of Prussia, PA 19406-1415

J. B. Hickman  
NRC Project Manager Millstone Unit 1  
U.S. Nuclear Regulatory Commission  
Mail Stop T-7E18  
Washington, DC 20555

L. A. Kauffman  
NRC Inspector  
U.S. Nuclear Regulatory Commission  
Region I  
475 Allendale Road  
King of Prussia, PA 19406-1415

C. J. Sanders  
NRC Project Manager  
U.S. Nuclear Regulatory Commission  
One White Flint North, Mail Stop 8B3  
11555 Rockville Pike  
Rockville, MD 20852-2738

J. M. Goshen  
NRC Senior Project Manager - Millstone ISFSI  
U.S. Nuclear Regulatory Commission, Mail Stop E3 D2M  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852-2738

F. S. Gee  
Spent Fuel Storage and Transportation, NMSS  
U.S. Nuclear Regulatory Commission  
One White Flint North  
11555 Rockville Pike, Mail Stop E3 D2M  
Rockville, MD 20852-2738

NRC Senior Resident Inspector  
Millstone Power Station