

# A TRANSNUCLEAR

E-21135  
May 5, 2004

Ms. Mary Jane Ross-Lee  
Spent Fuel Project Office, NMSS  
U. S. Nuclear Regulatory Commission  
11555 Rockville Pike M/S 0-6-F-18  
Rockville, MD 20852

Subject: Application for License Certification of the NUHOMS® HD Storage System  
Docket No. 072-01030.

Dear Ms. Ross-Lee:

Transnuclear, Inc. (TN) herewith submits its application for license approval under Subpart L for the NUHOMS® HD Dry Storage System with the 32PTH canister. In support of this application, enclosed is the NUHOMS® HD Horizontal Modular Storage System Safety Analysis Report (SAR).

At this time, one of TN's customers is planning to utilize the NUHOMS® HD 32PTH system at two different plants. To support the needs of this customer, fabrication of the system components must commence in the next couple of months to support an initial use in mid-2006. Accordingly, TN requests that the staff assign appropriate priority for review of this application to support our customer's needs.

The NUHOMS® HD 32PTH system is designed to store 32 intact ( or up to 16 damaged and balance intact) PWR fuel assemblies with a maximum assembly initial enrichment of 5.0 wt%, a maximum assembly average burnup of 60 GWd/MTU and a minimum cooling time of 5 years.

The NUHOMS® HD 32PTH system is designed to accommodate heat loads up to 34.8 kW per canister, uses the OS 187H transfer cask, and the horizontal storage module is designated as the HSM-H.

The 32PTH canister design is very similar to the 24PTH canister which is currently under your review as Amendment No. 8 to the NUHOMS® CoC No. 1004. The HSM-H used in the NUHOMS® HD 32PTH design is virtually identical to the HSM-H described and evaluated in Amendment No. 8, and the OS 187H transfer cask is basically the same as the OS 197 transfer cask with some dimensional and design changes to accommodate a larger canister and enhance heat transfer. While this is a "stand alone" application, the review the NRC staff has performed on Amendment No.8, especially the HSM-H, should be directly applicable to this application, thus helping to optimize staff review time for this application.

This submittal includes proprietary information. In accordance with 10 CFR 2.790, an affidavit is enclosed for withholding the proprietary information from public disclosure. The proprietary information is enclosed in separate binders.

*Rec'd w/out  
Encl 4*

*KPM5501*

May 5, 2004

Transnuclear looks forward to working with you and your staff on this license application. Should you or your staff require additional information to support your timely review of this application, please contact me.

Sincerely,

A handwritten signature in black ink that reads "Michael Mason". The signature is written in a cursive style with a large, prominent "M".

Michael Mason  
Chief Engineer

- Enclosures:**
- 1. Affidavit for withholding proprietary information.**
  - 2. Seven (7) copies of the NUHOMS® HD Horizontal Modular Storage System SAR (Non-Proprietary Version).**
  - 3. Seven (7) copies of the NUHOMS® HD Horizontal Modular Storage System SAR Proprietary pages.**
  - 4. Two (2) electronic copies of NUHOMS® HD Horizontal Modular Storage System SAR (Non-Proprietary Version).**

**AFFIDAVIT**

**STATE OF NEW YORK**

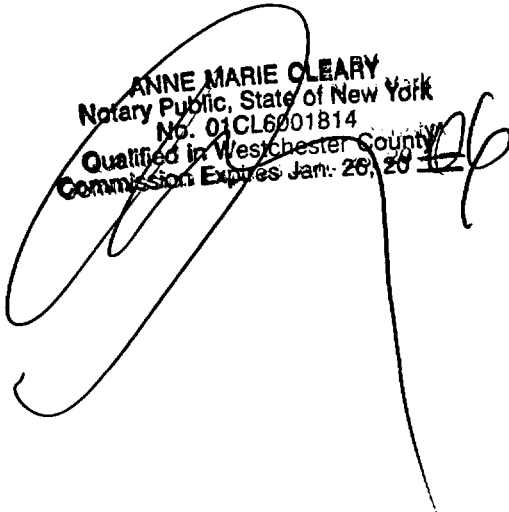
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**COUNTY OF WESTCHESTER**

**Before me, the undersigned authority, personally appeared Alan Hanson who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Transnuclear, Inc. and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:**

  
**ALAN HANSON**

**Sworn to and subscribed  
Before me this 6 day  
of April 2004.**

**ANNE MARIE OLEARY**  
Notary Public, State of New York  
No. 01CL6001814  
Qualified in Westchester County  
Commission Expires Jan: 20, 2012  


- (1) I am President of Transnuclear, Inc. and my responsibilities include reviewing the proprietary information sought to be withheld from public disclosure in connection with the licensing of spent fuel transport cask systems or spent fuel storage cask systems. I am authorized to apply for its withholding on behalf of Transnuclear, Inc.
- (2) I am making this Affidavit in conformance with the provisions of 10CFR Section 2.790 of the commission's regulations and in conjunction with the Transnuclear application for withholding accompanying this Affidavit.
- (3) I have personal knowledge of the criteria and procedures utilized by Transnuclear in designating information as a trade secret, privileged or as confidential commercial or financial information.
- (4) The following information is furnished pursuant to the provisions of paragraph 10CFR 2.790(b)(4) to determine whether the information sought to be withheld from public disclosure should be withheld.
  - (i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Transnuclear.
  - (ii) The information is of a type customarily held in confidence by Transnuclear, is not customarily disclosed to the public and is transmitted to the commission in confidence.
  - (iii) The information sought to be protected is not now available in public sources to the best of our knowledge and belief and the release of such information might result in a loss of competitive advantage as follows:
    - (a) It reveals the distinguishing aspects of a storage system where prevention of its use by any of Transnuclear's competitors without license from Transnuclear constitutes a competitive economic advantage over other companies.
    - (b) It consists of supporting data, including test data, relative to a component or material, the application of which secures a competitive economic or technical advantage.
    - (c) Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.
- (5) The information is being transmitted to the commission in confidence and, under the provision of 10CFR Section 2.390, it is to be received in confidence by the Commission.

- (6) The information sought to be protected is not available in public sources to the best of our knowledge and belief.
- (7) The proprietary information sought to be withheld is information contained in the Safety Analysis Report for the NUHOMS<sup>®</sup> -32PTH HD System. Specifically, Transnuclear drawings and computer program input:
- a) Transnuclear drawings 10494-72-1 through -12, 10494-72-15 through -21, 10494-72-100 through -109, and 10494-72-30.
  - b) SAR Section 4.16.1 and 4.16.2
  - c) SAR Section 5.5.2
  - d) SAR Section 6.6.2
- (8) This information should be held in confidence because it provides details of materials qualification programs that were developed at significant expense. This information has substantial commercial value to Transnuclear in connecting with competition with other vendors for contracts.

The subject information could only be duplicated by competitors if they were to invest time and effort equivalent to that invested by Transnuclear provided they have the requisite talent and experience.

Public disclosure of this information is likely to cause substantial harm to the competitive position of Transnuclear, because it would simplify design and evaluation tasks without requiring a commensurate investment of time and effort.