72-1004

TRANSNUCLEAR

September 19, 2003
NUH03-03-53

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 Amendment No. 8 of the NUHOMS® Certificate of Compliance (CoC) No. 1004 for Dry Spent Fuel Storage Casks, Revision 0

References:
1. Standardized NUHOMS® System CoC No. 1004, Amendment No. 7.
2. Standard Review Plan for Dry Cask Storage Systems, NUREG-1536, January 1997.
3. Final Safety Analysis Report (FSAR) for the Standardized NUHOMS® Horizontal Modular Storage for Irradiated Nuclear Fuel, Revision 6 (File NUH003.0103).

Dear Ms. Ross-Lee:

Transnuclear Inc. (TN) herewith submits its subject application for the addition of the NUHOMS®-24PTH system to the Standardized NUHOMS® System CoC No. 1004, Amendment No. 7 (Reference 1) which is currently pending final rulemaking.

TN is in discussions with two utilities for dry storage systems using the 24PTH system. To support the needs of these utilities, fabrication of the 24PTH canisters is planned to begin in early 2004 to support initial use in mid 2005. Accordingly, TN requests that the staff assign appropriate priority for review of this application consistent with the issuance of an RAI, if needed, by February 2004.

The NUHOMS®-24PTH system is designed to store up to 24 intact (or up to 12 damaged and balance intact) PWR fuel assemblies with a maximum assembly average initial enrichment of 5.0 wt. %, a maximum assembly average burn up of 62 GWd/MTU, and a minimum cooling time of 3.0 years.

The NUHOMS® -24PTH system is designed with three alternate system configurations, to accommodate a maximum heat load of up to 40.8 kW per canister. Depending on the system heat load, the 24PTH system is also provided with the flexibility to maximize the use of the existing Standardized NUHOMS HSM and the transfer cask described in the FSAR (Reference 3). The unique features provided to enhance the shielding and heat rejection capabilities of the system are fully described in the application.

NMSS01

Enclosure 2 of this submittal is organized in the following format to facilitate your staff's review:

Attachment A: Description, Justification and Evaluation of Amendment Changes,
Attachment B: Suggested Changes to CoC 1004 Technical Specifications and Associated Bases, and
Attachment C: Proposed Appendix P of the FSAR (Proprietary Information).

Attachment C includes a complete evaluation of the NUHOMS® 24PTH-DSC and is prepared in a format consistent with the Standard Review Plan for Dry Cask Storage (Reference 2).

This submittal includes proprietary information which may not be used for any purpose other than to support your staff's review of the application. In accordance with 10 CFR 2.790, I am providing an affidavit (Enclosure 1) specifically requesting that you withhold this proprietary information from public disclosure.

In addition to Appendix P, the proprietary information submitted herewith includes a confirmatory thermal analysis (Enclosure 4) of the thermal performance of the HSM-H using a computational fluid dynamics code. Also included herewith are ANSYS input files for the thermal analysis of HSM-H, SINDA/FLUINT input files for the TC (Enclosure 5), and ANSYS input files for the 24PTH DSC basket (Enclosure 6) for your use.

TN looks forward to working with you and your staff on this amendment. TN and the two potential 24PTH system users are prepared to meet with you shortly after you have received this application to discuss the contents of the submittal and resolve any questions you might have. Should you or your staff require additional information to support review of this application, please do not hesitate to contact me at 510-744-6053 or Mr. Jayant Bondre at 510-744-6043.

Sincerely,

U. B. Chopra
Licensing Manager

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Enclosures:

1. Affidavit for withholding proprietary information.
2. Ten (10) copies of Application for Amendment No. 8 to Advanced NUHOMS® COC 1004 (Proprietary Version).
3. Three (3) copies of Application for Amendment No. 8 to Advanced NUHOMS® COC 1004 (Non-Proprietary Version).
4. TN Calculation, NUH24PTH.0422, Revision 0, including a CD containing FLUENT/ICEPAK Run Log (Proprietary).
5. ANSYS Input Files for the 100°F, 40.8 kW HSM-H Storage Case and SINDA/FLUINT Input Files for the 100°F, 40.8 kW OS197 FC Transfer Case (1 Proprietary CD).
6. ANSYS Input Files for the 100°F, 40.8 kW, 24PTH DSC Basket Storage Case (2 Proprietary CDs).

AFFIDAVIT PURSUANT
TO 10 CFR 2.790

Transnuclear, Inc.)
State of Washington) SS.
County of Pierce)

I, William D. Gallo, depose and say that I am Senior Vice President of Transnuclear, Inc., duly authorized to make this affidavit, and have reviewed or caused to have reviewed the information which is identified as proprietary and referenced in the paragraph immediately below. I am submitting this affidavit in conformance with the provisions of 10 CFR 2.790 of the Commission's regulations for withholding this information.

The information for which proprietary treatment is sought is contained in Enclosures 2, 4, 5, and 6 and as listed below:

1. Attachment C of the Application for Amendment No. 8 to the NUHOMS® CoC 1004 (Enclosure 2, Proprietary Version)
2. Calculation NUH24PTH.0422, Revision 0 (Enclosure 4).
3. ANSYS Input Files for the 100°F, 40.8 kW, HSM-H Storage Case and SINDA/FLUINT Input Files for the 100°F, 40.8 kW, OS197 FC Transfer Case (Enclosure 5).
4. ANSYS Input Files for the 100°F, 40.8 kW, 24PTH DSC Basket (Enclosure 6, 2 CDs).

This section of the document, the listed calculation and input files have been appropriately designated as proprietary.

I have personal knowledge of the criteria and procedures utilized by Transnuclear, Inc. in designating information as a trade secret, privileged or as confidential commercial or financial information.

Pursuant to the provisions of paragraph (b) (4) of Section 2.790 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure, included in the above referenced document, should be withheld.

1) The information sought to be withheld from public disclosure is a proprietary Safety Analysis Report, supporting Calculation package and ANSYS/SINDA FLUINT input files relating to the analysis of the NUHOMS® Cask, which is owned and has been held in confidence by Transnuclear, Inc.

2) The information is of a type customarily held in confidence by Transnuclear, Inc. and not customarily disclosed to the public. Transnuclear, Inc. has a rational basis for determining the types of information customarily held in confidence by it.

3) The information is being transmitted to the Commission in confidence under the provisions of 10 CFR 2.790 with the understanding that it is to be received in confidence by the Commission.

4) The information, to the best of my knowledge and belief, is not available in public sources, and any disclosure to third parties has been made pursuant to regulatory

provisions or proprietary agreements which provide for maintenance of the information in confidence.

5) Public disclosure of the information is likely to cause substantial harm to the competitive position of Transnuclear, Inc. because:

a) A similar product is manufactured and sold by competitors of Transnuclear, Inc.

b) Development of this information by Transnuclear, Inc. required thousands of man-hours and hundreds of thousands of dollars. To the best of my knowledge and belief, a competitor would have to undergo similar expense in generating equivalent information.

c) In order to acquire such information, a competitor would also require considerable time and inconvenience related to the development of a design and analysis of a dry spent fuel storage system.

d) The information required significant effort and expense to obtain the licensing approvals necessary for application of the information. Avoidance of this expense would decrease a competitor's cost in applying the information and marketing the product to which the information is applicable.

e) The information consists of description of the design and analysis of a dry spent fuel storage and transportation system, the application of which provides a competitive economic advantage. The availability of such information to competitors would enable them to modify their product to better compete with Transnuclear, Inc., take marketing or other actions to improve their product's position or impair the position of Transnuclear, Inc.'s product, and avoid developing similar data and analyses in support of their processes, methods or apparatus.

f) In pricing Transnuclear, Inc.'s products and services, significant research, development, engineering, analytical, licensing, quality assurance and other costs and expenses must be included. The ability of Transnuclear, Inc.'s competitors to utilize such information without similar expenditure of resources may enable them to sell at prices reflecting significantly lower costs.

Further the deponent sayeth not.

William D. Gallo
Senior Vice President, Transnuclear, Inc.

Subscribed and sworn to me before this 16th day of September, 2003, by William D. Gallo.

Bonnie M Hargis
Notary Public

BONNIE M. HARGIS NOTARY PUBLIC STATE OF WASHINGTON COMMISSION EXPIRES 10-14-03