

September 29, 2000 DCS-TNW0009-15

Mr. Steven Baggett 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 approval of Advanced NUHOMS® Horizontal Modular Storage System for Irradiated Nuclear Fuel

References:

- 1. Amendment No. 2, Certificate of Compliance No. 1004 for the standardized NUHOMS[©] Storage System, dated 8/30/00
- 2. Certificate of Compliance No. 9255 for the NUHOMS®-MP187 Multi-Purpose Cask Transportation Package, Revision 4, dated 03/30/00
- 3. Sacramento Municipal Utilities District, Rancho Seco Independent Spent Fuel Storage Installation, Material License SNM-2510, dated 6/30/00, (Docket 72-11)
- E. W. Brach (NRC) to R. A. Ayres (TN West) letter dated 10/27/99, Transnuclear West, Inc., 10 CFR Part 72 Quality Assurance Program (TAC No. L22711)

Dear Mr. Baggett:

Transnuclear West Inc., (TN West) herewith submits an application for approval of a new spent fuel storage cask design. In accordance with the requirements of 10CFR 72.230(a), TN West has included with the application a Safety Analysis Report (SAR), which describes the proposed cask design and how the cask is used to store spent fuel safely.

This application has been the subject of several meetings between TN West and the NRC. TN West has addressed the issues arising at these meetings in this submittal to ensure a complete application.

The Advanced NUHOMS® System consists of a model 24PT1 Dry Shielded Canister (24PT1-DSC) and an Advanced Horizontal Storage Module (AHSM). This design is based on previously approved NUHOMS® system designs (References 1, 2, and 3). The transfer cask to be utilized in conjunction with this application is the OS 197 Cask (Reference 1) or the MP

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Mr. Steven Baggett
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187 Cask (References 2 and 3). Detailed analysis of the transfer cask is not included in this application. References 1, 2 and 3 are identified in this application where the associated analyses are credited. Discussions of the relationship between the current application and the approved applications are provided in the appropriate Chapters of the SAR.

This system is an enhancement of the Standardized NUHOMS® system design (Reference 1) to accommodate high seismic requirements and provide enhanced shielding capability for use in congested sites.

This application has been prepared using the guidance contained in NUREG 1536 and associated Interim Staff Guidance documents issued to date. No specific deviations from these guidance documents are considered necessary to support this application.

An amendment to Reference 2 is currently being prepared to incorporate the 24PT1-DSC and its payload as a transportable canister configuration using the MP187 cask (Reference 2) for transportation. The analyses associated with this 10CFR72 application have included bounding 10CFR71 analyses, where appropriate, to facilitate NRC review and preclude the need to rereview these 24PT1-DSC analyses for an amendment to CoC 9255. The CoC 9255 amendment will rely on these calculations and provide supplementary calculations in those areas where unique 10CFR71 requirements exist. We plan to submit this amendment in January 2001 to support the goal of avoiding unnecessary duplication in the review effort.

TN West plans to submit a copy of the TN West calculations prepared in support of this SAR by 10/13/00. This submittal will include electronic copies of appropriate computer analysis input/output files to facilitate your staff's review.

Analyses performed in support of this application and future fabrication activities to be performed are governed by the TN West QA program approved by the NRC (Reference 4).

Specific sections of this SAR, which are considered proprietary and should be withheld from public disclosure are identified in Attachment 1. In accordance with 10 CFR 2.790, TN West is providing an affidavit specifically requesting that you withhold this proprietary information from public disclosure.

TN West is prepared to meet with you at your earliest convenience to discuss the contents of this submittal. In order to meet the needs of current and potential TN West clients, and based on our pre-submittal meetings, TN West requests a review schedule which is consistent with the issuance of a preliminary SER by September 2001 and a Certificate of Compliance no later than September 2002.

Should you or your staff require additional information, please do not hesitate to contact Mr. U. B. Chopra (510-744-6053) or me (510-744-6033).

Sincerely,

Robert L. Grubb

Vice President

- Attachments: 1. Affidavit for withholding proprietary information.
 - 2. Ten (10) copies of the SAR entitled, "Safety Analysis Report for the Advanced NUHOMS® Horizontal Modular Storage System For Irradiated Nuclear Fuel", Revision 0.

AFFIDAVIT PURSUANT TO 10 CFR 2.790

Transnuclear West Inc.)		
State of California)	SS.	
County of Alameda)		

I, Robert L. Grubb, depose and say that I am Vice President of Transnuclear West 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 sections of Attachment 2 (SAR) of this submittal and as listed below:

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Chapter 1 - Section 1.5.2 (24PT1-DSC and AHSM Drawings)
Chapter 3 - Table 3.5-1
            Table 3.5-3
            Table 3.5-4
            Table 3.5-6
Chapter 4 - Page 4.4-9
            Page 4.4-10
            Page 4.4-11
            Table 4.4-9
            Table 4.4-10
            Figure 4.4-2
            Figure 4.4-3
            Figure 4.4-4
            Figure 4.4-5
            Figure 4.4-6
            Figure 4.4-7
            Figure 4.4-8
Chapter 5 - Table 5.2-2
            Table 5.2-3
            Table 5.2-4
            Table 5.2-5
            Table 5.2-6
            Figure 5.4-1
            Figure 5.4-2
            Figure 5.4-3
            Figure 5.4-4
            Figure 5.4-5
            Figure 5.4-6
            Figure 5.4-7
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Chapter 6 - Table 6.2-1
            Table 6.2-2
            Page 6.3-5
            Table 6.3-1
            Table 6.3-2
            Table 6.3-3
            Figure 6.3-7
            Page 6.4-2
            Table 6.4-3
            Figure 6.4-2
            Figure 6.4-3
            Table 6.5-3
            Table 6.5-4
Chapter 11- Page 11.2-3
            Page 11.2-4
            Page 11.2-6
            Page 11.2-7
            Page 11.2-9
            Table 11.2-2
            Figure 11.2-2
            Figure 11.2-3
            Figure 11.2-4
            Figure 11.2-5
            Figure 11.2-6
            Figure 11.2-7
            Figure 11.2-8
            Figure 11.2-9
            Figure 11.2-10
            Figure 11.2-11
            Figure 11.2-12
            Figure 11.2-13
            Figure 11.2-15
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These sections of the document have been appropriately designated as proprietary.

I have personal knowledge of the criteria and procedures utilized by Transnuclear West 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 design and calculation details of NUHOMS[®] spent fuel storage systems, which is owned and has been held in confidence by Transnuclear West Inc.
- 2) The information is of a type customarily held in confidence by Transnuclear West Inc. and not customarily disclosed to the public. Transnuclear West 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 West Inc. because:
 - a) A similar product is manufactured and sold by competitors of Transnuclear West Inc.
 - b) Development of this information by Transnuclear West 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 West Inc., take marketing or other actions to improve their product's position or impair the position of Transnuclear West's product, and avoid developing similar data and analyses in support of their processes, methods or apparatus.

Page 3 of 4

Attachment 1 to DCS-TNW0009-15

f) In pricing Transnuclear West's products and services, significant research, development, engineering, analytical, licensing, quality assurance and other costs and expenses must be included. The ability of Transnuclear West'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.

SHANNON L. CHRISTENSEN Z COMM. # 1264196 NOTARY PUBLIC-CALIFORNIA O ALAMEDA COUNTY O COMM. EXP. MAY 18, 2004

Robert L. Grubb

Vice President

Transnuclear West Inc.

Subscribed and sworn to me before this, September 29, 2000, by Robert L. Grubb.

Notary Public