



**SMUD**

SACRAMENTO MUNICIPAL UTILITY DISTRICT □ P. O. Box 15830, Sacramento CA 95852-1830, (916) 452-3211  
AN ELECTRIC SYSTEM SERVING THE HEART OF CALIFORNIA

MPC&D 99-170

November 24, 1999

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

Docket No. 72-11  
Rancho Seco Independent Spent Fuel Storage Installation  
**RANCHO SECO INDEPENDENT SPENT FUEL STORAGE INSTALLATION SAFETY  
ANALYSIS REPORT, REVISION 4**

Attention: Randy Hall

Attached is Revision 4 to the Rancho Seco Independent Spent Fuel Storage Installation (ISFSI) Safety Analysis Report (SAR). ISFSI SAR, Revision 4 incorporates information provided previously in our response to the NRC's last request for additional information. Additional changes incorporated into Revision 4 include:

1. The deletion of certain operating limits that are now contained in the ISFSI Technical Specifications.
2. A discussion on the long-term efficacy of the neutron absorber panels in the FO and FC canisters.
3. A discussion on the increase in neutron dose resulting from the loss of the cask neutron shield after a fire at the ISFSI.

The Rancho Seco ISFSI SAR consists of four volumes. Volumes I, II, and III provide a narrative description of the Rancho Seco ISFSI and the NUHOMS horizontal modular storage system. Volume IV of the SAR consists of calculations and drawings. Volume IV is proprietary and may not be used for any purpose other than to support the review of the material in Volumes I - III. In accordance with 10 CFR 2.790, Volume IV provides an affidavit requesting that the NRC withhold proprietary information from public disclosure.

Appendix A of the SAR provides an overview of where the MP-187 Cask and Dry Shielded Canisters (DSCs) take exception to ASME Code requirements. Appendix B provides excerpted text from the Standardized NUHOMS SAR for portions of the Rancho Seco SAR that reference the Standardized SAR.

Handwritten notes: *ltn encl*, *1 | w/opap*, *NIPPF*  
*chang: URC PDL*

Members of your staff with questions requiring additional information or clarification may contact Bob Jones at (916) 732-4843.

Sincerely,



Steve Redeker  
Manager, Plant Closure & Decommissioning

cc: E.W. Merschoff, NRC Region IV, Arlington  
Dick Dudley, NRC, Washington

**AFFIDAVIT PURSUANT  
TO 10 CFR 2.790**

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

I, Robert M. Grenier, depose and say that I am President and Chief Operating Officer 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 the calculation packages and drawings listed below:

**CALCULATION PACKAGES**

<u>File #</u>	<u>Revision #</u>	<u>Title</u>
2069.02XX	---	Project Structural Calculations
2069.0200	0	NUHOMS <sup>®</sup> MP187 FO-DSC 10CFR72 Structural Analysis
2069.0201	3	NUHOMS <sup>®</sup> MP187 FO-DSC 10CFR72 Structural Analysis
2069.0202	1	SMUD HSM 10CFR72 Structural Analysis – Pre-fab. Modules for Onsite Conditions
2069.0203	2	NUHOMS <sup>®</sup> MP187 Cask 10CFR72 Structural Analysis - NDP Cask for Onsite Load Conditions
2069.0204	5	NUHOMS <sup>®</sup> MP187 Guide Sleeve Structural Analysis
2069.0205	3	NUHOMS <sup>®</sup> MP187 FF-DSC 10CFR72 Structural Analysis
2069.0214	2	Cask/HSM Restraint System Structural Analysis
2069.0216	2	Rancho Seco NUHOMS <sup>®</sup> Short Cavity (FO) Dry Shielded Canister Shell Assembly Structural Analysis
2069.0217	0	FO/FC Dry Shielded Canister Basket Assembly Structural Analysis
2069.0219	1	Long Cavity (FC/FF) Dry Shielded Canister Shell Assembly Structural Analysis
2069.0220	2	Lead Shield Plug Evaluation for SMUD FC/FF DSC Calculation

<b>2069.04XX</b>	<b>---</b>	<b>Project Thermal Calculations</b>
2069.0400	3	Rancho Seco HSM Thermal Analysis
2069.0401	4	MP187 Cask Thermal Analysis for Onsite Transfer and Storage Conditions
2069.0402	1	Fire Analysis for the Rancho Seco ISFSI During Transfer, Loading and Storage Conditions
2069.0453	4	MP187 Cask Peak Pressure Calculation for DSC Cavity and Cask DSC Annulus During Storing DSC
NUH005.0450	0	Dry Storage Clad Temperature Acceptance Limit for Rancho Seco Fuel Assemblies
<b>2069.05XX</b>	<b>---</b>	<b>Project Shielding Calculations</b>
2069.0500	1	Radiological Source Term Calculation for Rancho Seco fuel
2069.0501	2	Rancho Seco Shielding Material Densities Calculation
2069.0502	4	Rancho Seco Site Dose Calculation
2069.0503	2	Rancho Seco Occupational Exposure Calculation
2069.0505	2	Rancho Seco Fission Gas Release Dose Assessment
2069.0507	0	Rancho Seco NUHOMS® DSC Confinement Evaluation

#### DRAWINGS

<u>Drawing #</u>	<u>Revision #</u>	<u>Title</u>
NUH-05-4001	9	NUHOMS®MP187 Multi-purpose Cask Main Assembly (six sheets)
NUH-05-4003	7	NUHOMS®MP187 Multi-purpose Cask Onsite Transfer Arrangement (two sheets)
NUH-05-4004	12	NUHOMS® FO-DSC and FC-DSC for PWR Fuel Main Assembly (four sheets)
NUH-05-4005	8	NUHOMS® FF-DSC for PWR Fuel Main Assembly (four sheets)

These documents have been appropriately designated as proprietary.

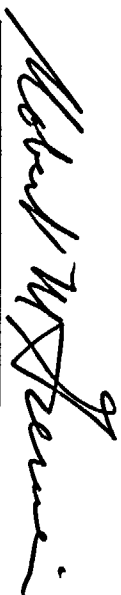
I have personal knowledge of the criteria and procedures utilized by Transnuclear West Inc. in designating information as a trade secret, privileged or as confidential commercial or financial information.

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 are licensing drawings and calculations of a concrete modular storage and transportation system, which is owned and has been held in confidence by Transnuclear West Inc.

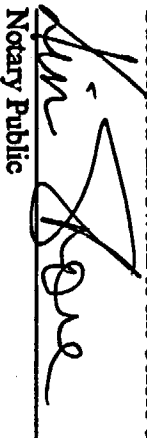
- 2) The information is of a type customarily held in confidence by Transnuclear West Inc. and not customarily disclosed to the public. Transnuclear West Inc. has a rational basis for determining the types of information customarily held in confidence by it.
- 3) The information is being transmitted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



Robert M. Grenier  
President and Chief Operating Officer  
Transnuclear West Inc.

Subscribed and sworn to me before this 22<sup>nd</sup> day of November, 1999, by Robert M. Grenier.

  
Notary Public

