



February 21, 2007  
E-24651

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852

72-1004

Subject: Supplemental Information Regarding the Application for Amendment 10 of the NUHOMS® Certificate of Compliance No. 1004 for Spent Fuel Storage Casks, Revision 0

Gentlemen:

During a February 8, 2007 public meeting regarding the Transnuclear, Inc. (TN) application to amend Certificate of Compliance (CoC) 1004 for the Standardized NUHOMS® System, the NRC Staff requested input and output files for structural, thermal, and nuclear analyses in order to facilitate expediting the staff's review. This submittal forwards those files.

The information in this submittal is proprietary and may not be used for any purpose other than to facilitate expediting the NRC staff's review of the application. In accordance with 10 CFR 2.390, I am providing an affidavit (Enclosure 1) specifically requesting that you withhold this proprietary information from public disclosure.

Should the NRC staff require additional information regarding this submittal, please do not hesitate to contact Mr. Don Shaw at 410-910-6878 or me at 410-910-6930.

Sincerely,

Robert Grubb  
Senior Vice President - Engineering

cc: Mr. Joseph Sebrosky (NRC SFST) (one paper copy of this cover letter and Enclosures 1 and 2, plus one copy of Enclosure 3)

Enclosures:

1. Affidavit
2. Listing of Disk Numbering and Contents
3. One electronic copy of each disk listed in Enclosure 2

Nmssol

7135 Minstrel Way, Suite 300, Columbia, MD 21045  
Phone: 410-910-6900 • Fax: 410-910-6902

Letter, Enclosure 1, &  
Enclosure 2 SUNSI review  
complete should be  
publicly available. Enclosure  
3 non-public & should be placed  
in file cabinet for Sebrosky

**AFFIDAVIT PURSUANT  
TO 10 CFR 2.390**

Transnuclear, Inc.                    )  
State of Maryland                )    SS.  
County of Howard                 )

I, Robert Grubb, 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 2.390 of the Commission's regulations for withholding this information.

The information for which proprietary treatment is sought is contained in Enclosure 3 and as listed below:

1.        Certain computer analysis input and output files associated with Transnuclear's application for Amendment 10 of the NUHOMS® Certificate of Compliance No. 1004 for Spent Fuel Storage Casks, Revision 0

These documents have been appropriately designated as proprietary.

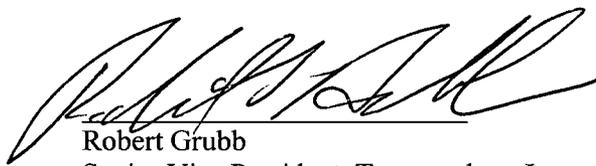
I have personal knowledge of the criteria and procedures utilized by Transnuclear, Inc. in designating information as a trade secret, privileged or as confidential commercial or financial information.

Pursuant to the provisions of paragraph (b) (4) of Section 2.390 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 certain input and output files related to the analysis of NUHOMS® casks which are owned and have 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 2.390 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.

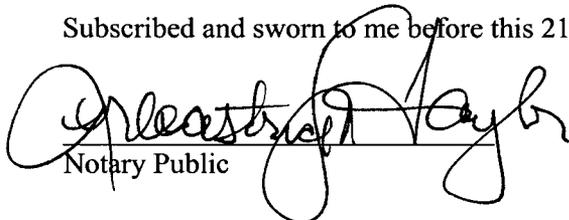
- 5) Public disclosure of the information is likely to cause substantial harm to the competitive position of Transnuclear, Inc. because:
- a) A similar product is manufactured and sold by competitors of Transnuclear, Inc.
  - b) Development of this information by Transnuclear, Inc. required expenditure of considerable resources. 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 descriptions of the design and analysis of dry spent fuel storage and transportation systems, the application of which provide 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.

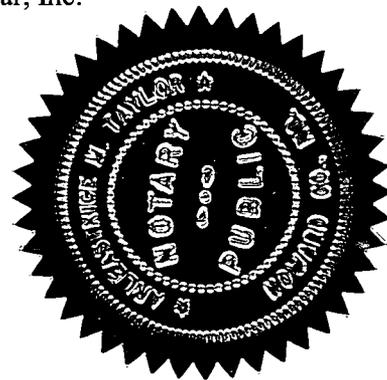
  
Robert Grubb

Senior Vice President, Transnuclear, Inc.

Subscribed and sworn to me before this 21<sup>st</sup> day of February, 2007.

  
Notary Public

My Commission Expires 10 / 14 / 2008



Listing of Disk Numbering and Contents  
(all files are Proprietary)

Disk ID No. (size)	Discipline	System	File Series (topics)	Number of Files
1 (2.24 GB)	Structural	32PTH1	001-os200-sidedrop-model7.inp to 006-os200-sidedrop-run75g7.rst.zip  (OS200 Transfer Cask Side Drop - Input files to create model)	001 to 006 for a total of 6
2 (603 MB)	Structural	32PTH1	A001-32PTH_30_7Celout_75gAcelTimeHist.k to A103-32PTH_30_7Celout_75gAcelTimeHist_d3plot95  (NUHOMS 32PTH1 Basket 75g Side Drop – input/output files)	A001 to A103 for a total of 103
3 (606 MB)	Structural	32PTH1	A104-32PTH_30_7Celout_75gAcelTimeHist_d3plot96 to A209-32PTH_30_7Celout_75gAcelTimeHist_d3plot201  (NUHOMS 32PTH1 Basket 75g Side Drop - output files)	A104 to A209 for a total of 106
4 (600 MB)	Structural	32PTH1	B001-32PTH_30_7C_95gAcelTimeHist.k to B081-32PTH_30_7C_95gAcelTimeHist_d3plot73  (NUHOMS 32PTH1 Basket 95g Side Drop – input/output files)	B001 to B081 for a total of 81
5 (572 MB)	Structural	32PTH1	B082-32PTH_30_7C_95gAcelTimeHist_d3plot74 to B182-32PTH_30_7C_95gAcelTimeHist_d3plot174  (NUHOMS 32PTH1 Basket 95g Side Drop - output files)	B082 to B182 for a total of 101
6 (500 MB)	Structural	32PTH1	C001-os200_botenddrop_model.inp to C019-WE14x14_ZCA_side_drop.rst  (OS200 Transfer Cask Bottom End Drop – input/macro/ANSYS files) (NUHOMS 32PTH1 Canister 80 kip & 110 kip Grapple Pull Load - input and ANSYS files) (NUHOMS 32PTH1 Canister side drop - input and ANSYS files) (WE 14x14 std fuel end drop - input and ANSYS files)	C001 to C019 for a total of 19
7 (546 MB)	Structural	61BTH	A001-b61_transf_hand4_new_e10.inp to A008-b61_18.5deg_rail_newrail.rst  (NUHOMS 61BTH Basket Transfer Loading - input and ANSYS files) (NUHOMS 61BTH Basket 75g Side Drop - input and ANSYS files)	A001 to A008 for a total of 8
8 (235 MB)	Structural	61BTH	B001-B32pgp4.inp to B012-sidedrop_siemens_9x9_temp_75g.rst  (NUHOMS 61BTH Canister 60 kips & 80 kips Grapple Pull Load - input and ANSYS files) (NUHOMS 61BTH Canister side drop - input and ANSYS files) (Siemens 9x9 fuel end drop - input and ANSYS files) (Siemens 9x9 fuel side drop - input and ANSYS files)	B001 to B012 for a total of 12

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(all files are Proprietary)

9 (55.2 MB)	Readme	32PTH1	001-Readme_Nuclear_32PTH1.txt	001 to 001 for a total of 1
	Shielding	32PTH1	002-BN_3226.in to 046-BPRA_mes  (please see 001 readme file)	002 to 046 for a total of 45
	Criticality	32PTH1	047-B15B10.in to 096-w14_2300d_070.out  (please see 001 readme file)	047 to 096 for a total of 50
10 (92.1 MB)	Readme	61BTH	001-Readme_Nuclear_61BTH.txt	001 to 001 for a total of 1
	Shielding	61BTH	002-BN_1318.in to 082-61BTH_2x10_n.o  (please see 001 readme file)	002 to 082 for a total of 81
	Criticality	61BTH	083-GE12.in to 102-t2_e31_dam16_e090.out  (please see 001 readme file)	083 to 102 for a total of 20
11 (238 MB)	Thermal	32PTH1	A001-bv_41kw_std.inp to A028-bv_41kw.rth  (HSM-H accident storage, blocked vent @ 40.8 kW, 117°F ambient – input and ANSYS files)	A001 to A028 for a total of 28
12 (131 MB)	Thermal	32PTH1	B001-OS200_32PTH1_Case408V_Load.inp to C022-Loss_of_Neutron_Shield_408kw_DSC.dat  (TC off-normal vertical, 40.8 kW, 140°F ambient – input and SINDA/FLUINT files (TC accident transfer, 40.8 kW, 117°F ambient – input and SINDA/FLUINT files)	B001 to B023 and C001 to C022 for a total of 45
13 (2.09 GB)	Thermal	32PTH1	D001-T41_C.inp to D013-Ptmp32.mac  (DSC off-normal transfer vertical, 40.8 kW, 140°F ambient – input and ANSYS files)	D001 to D013 for a total of 13
14 (4.08 GB)	Thermal	32PTH1	E001-S41_C1.inp to E018-Ptmp32.mac  (DSC accident storage, blocked vent @ 40.8 kW, 117°F ambient – input and NASYS files)	E001 to E018 for a total of 18

Listing of Disk Numbering and Contents  
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15 (1.30 GB)	Thermal	32PTH1	F001-T41_AC.inp to F011-Ptmp32.mac  (DSC accident transfer, 40.8 kW, 117°F ambient – Input and ANSYS files)	F001 to F011 for a total of 11
16 (404 MB)	Thermal	61BTH	G001-F9run.txt to J019-frcvv.f  (Fuel assembly effective thermal conductivity – input and ANSYS files) (HSM-H accident storage, blocked vent @ 31.2 kW, 117°F ambient – Input and ANSYS files) (TC off-normal vertical, 31.2 kW, 120°F ambient – Input and SINDA/FLUINT files) (TC accident transfer, 31.2 kW, 117°F ambient – Input and SINDA/FLUINT files)	G001 to G011, H001 to H025, I001 to I021 and J001 to J019 for a total of 76
17 (3.68 GB)	Thermal	61BTH	K001-TOT2.inp to K020-TOT2H28D.tem  (DSC off-normal transfer vertical, 31.2 kW, 120°F ambient – Input and ANSYS files)	K001 to K020 for a total of 20
18 (1.76 GB)	Thermal	61BTH	L001-SHT2BVX.inp to L012-T2HH31BV.tem  (DSC accident storage, blocked vent @ 31.2 kW, 117°F ambient – Input and ANSYS files)	L001 to L012 for a total of 12
19 (1.76 GB)	Thermal	61BTH	M001-TOT2ACCX.inp to M012-TOT2ACC.tem  (DSC accident transfer, 31.2 kW, 117°F ambient – Input and ANSYS files)	M001 to M012 for a total of 12