



Department of Energy

Office of Civilian Radioactive Waste Management
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QA: N/A
Project No. WM-00011

MAY 30 2008

OVERNIGHT MAIL

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SUMMARY TABLE AND COMPUTER MODEL FILES FOR U.S. DEPARTMENT OF ENERGY (DOE) TOTAL SYSTEM PERFORMANCE ASSESSMENT (TSPA) FOR A PLANNED HIGH-LEVEL RADIOACTIVE WASTE REPOSITORY AT YUCCA MOUNTAIN, NEVADA

Reference: Ltr, Davis to Boyle, dtd 5/22/08 (Model Files for U.S. Department of Energy Total System Performance Assessment for a Planned High-Level Radioactive Waste Repository at Yucca Mountain, Nevada)

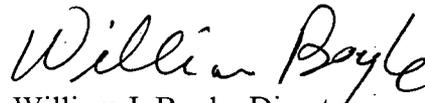
In response to the U.S. Nuclear Regulatory Commission (NRC) staff request in discussions on May 13, 2008, Enclosure 1 (external hard-drive) is provided as one copy of the DOE TSPA computer model files used in support of the license application for the planned high-level radioactive waste repository at Yucca Mountain, Nevada. DOE is providing the computer model files for TSPA that allow execution of the TSPA model. These files include the appropriate TSPA GoldSim model files, including limited intermediate results viewable within the GoldSim Player application, so as to facilitate NRC staff review. Enclosure 2 is a summary table of the information provided in Enclosure 1.

As requested in your correspondence (Reference), these files are provided in electronic form, on an expedited basis. DOE has not altered the files from the form used for the TSPA. As such, this submittal does not fully conform with the NRC's November 20, 2007, *Guidance for Electronic Submissions to the NRC*, Revision 3. Expedient transmittal of the information maximizes its utility to NRC's technical staff, and is viewed as an overriding consideration in order to comply with your request for the subject enclosed information.

NMSS 25
EXTERNAL DRIVE
RETAINED BY PM

MAY 30 2008

There are no regulatory commitments in this letter or its enclosures. If there are questions about this response to your request, please contact Jeffrey R. Williams at (202) 586-9620 or e-mail jeff.williams@hq.doe.gov.



William J. Boyle, Director
Regulatory Authority Office

RAO:WJB-0856

Enclosures:

1. Portable External Hard-Drive containing
TSPA – License Application Files
2. Summary of Contents for Electronic Submittal
of TSPA – License Application

cc w/o encls:

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Enclosure 2

Summary of Contents for Electronic Submittal of Total System Performance Assessment (TSPA) - License Application

The table below summarizes the contents of the external hard-drive submittal. All of this information is in an existing DTN except as noted. All the files have a readme file that explains the contents in more detail. The following bullets provide a general summary of the contents:

- 13 Groundwater Model GoldSim files and associated GoldSim Player Files
- 23 Volcanic Eruptive GoldSim files and associated GoldSim Player Files
- TSPA Input Database
- Software (DLLs and ExDoc)

Note: The GoldSim Software is not included.

*attached by 1/10/04
Jon Chan*

Row #	File or Folder	Name	DTN	Size in Bytes	Brief Description of Contents
1	File	ReadMe.doc	MO0710ADTSPAWO.000	280,064	Readme file for DTN MO0710ADTSPAWO.000
2	Folder	Input Files for v5.005	MO0710ADTSPAWO.000	544,680,961	Input Files required to run v5.005 cases
3	Folder	LA v5.005_ED_003000_000 (1Myr)	MO0710ADTSPAWO.000	5,328,819,387	Groundwater-Early Drip Shield Failure for 1 million years
4	Folder	LA v5.005_ED_003000_001 (10kyr)	MO0710ADTSPAWO.000	8,283,624,257	Early Drip Shield Failure for 10k years
5	Folder	LA v5.005_EW_006000_000 (1Myr)	MO0710ADTSPAWO.000	10,239,741,440	Early Waste Package Failure for 1 million years
6	Folder	LA v5.005_EW_006000_001(10kyr)	MO0710ADTSPAWO.000	9,854,240,443	Early Waste Package Failure for 10k years
7	Folder	LA v5.005_HI_009000_000	MO0710ADTSPAWO.000	4,132,076,645	Human Intrusion
8	Folder	LA v5.005_IG_003000_000 (1Myr)	MO0710ADTSPAWO.000	2,050,478,475	Igneous Intrusion for 1 million years
9	Folder	LA v5.005_IG_003000_001 (10kyr)	MO0710ADTSPAWO.000	2,750,575,445	Igneous Intrusion for 10k years
10	Folder	LA v5.005_NC_000300_000 (1Myr)	MO0710ADTSPAWO.000	1,342,309,648	Nominal General Corrosion Failed WPs for 1 million years
11	Folder	LA v5.005_NC_000300_004 (10kyr)	MO0710ADTSPAWO.000	568,694,453	Nominal General Corrosion Failed WPs for 10k years
12	Folder	LA v5.005_SF_010800_000 (1Myr)	MO0710ADTSPAWO.000	3,571,969,553	Seismic Fault Displacement Failed WPs for 1 million years
13	Folder	LA v5.005_SF_010800_001 (10kyr)	MO0710ADTSPAWO.000	10,075,742,913	Seismic Fault Displacement Failed WPs for 10k years
14	Folder	LA v5.005_SM_009000_001 (10kyr)	MO0710ADTSPAWO.000	11,943,961,939	Seismic Mechanical Damage Failed WPs for 10k years
15	Folder	LA v5.005_SM_009000_003(1Myr Rerun)	MO0710ADTSPAWO.000	11,092,539,672	Seismic Mechanical Damage Failed WPs for 1 million years
16	File	ReadMe.doc	MO0710ADTSPAWI.000	205,824	Readme file for DTN MO0710ADTSPAWI.000
17	Folder	TSPA Input DB Contents	MO0710ADTSPAWI.000	78,391,808	Contents of the TSPA Input DB. Need software.
18	Folder	Ready for use TSPA Input Database	Not applicable – on LSN	75,501,568	Copy of TSPA Input Data Base. Includes software. Note, will need to use with Microsoft Access 2000. Passwords are 1111.
19	Folder	GoldSim Files (Player) for v5.005 and vE1.004	MO0710ADTSPAWI.000	322,583,622	GoldSim Player file for versions shown
20	File	ReadMe.doc	MO0709TSPAREGS.000	203,776	Readme file for DTN MO0710ADTSPAWI.000
21	Folder	Input Files for vE1.004	MO0709TSPAREGS.000	1,796,354,261	Input Files required to run vE1.004 cases
22	Folder	1M_Year_ExDoc_Runs	MO0709TSPAREGS.000	13,762,712,501	Volcanic Eruptive (1Myr) used with ExDoc
23	Folder	1M_Year_GoldSim_Weighted	MO0709TSPAREGS.000	124,236,231	Volcanic Eruptive (1Myr) Weighted
24	Folder	20K_Year_ExDoc_Runs	MO0709TSPAREGS.000	5,309,372,578	Volcanic Eruptive (20kyr) used with ExDoc
25	Folder	20K_Year_GoldSim_Weighted	MO0709TSPAREGS.000	59,961,344	Volcanic Eruptive (20kyr) Weighted
26	Folder	Copy of vE1.004 Master Case	MO0709TSPAREGS.000	370,968,063	Volcanic Eruptive Model Development Master
27	Folder	Player Files	MO0805TSPAGWGF.000	51,552,087,781	GoldSim Player files with results for GoldSim Files listed on Rows 3 to 15 and 22 to 25
28	Folder	Software	Not applicable – on LSN	11,267,879	All DLLs that run with GoldSim plus ExDoc.
29	File	dirlist.txt	Not applicable –provides detail for this transmittal	541,187	Directory listing of all enclosed files.