



U.S. Nuclear Waste Technical Review Board

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NUWASTE Results

Scenario 2.2

Spent Fuel Discharged Through 2100

**Presented to: NWTRB Workshop on Evaluation of Waste Streams
Associated with LWR Fuel Cycle Options**

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June 6/7, 2011

NUWASTE Results - Scenario 2.2

Spent Fuel Discharged Through 2100

BWR PWR

- Total number & mass of assemblies discharged through 2100, Output Measures 2.2.2.1) and 2.2.2.2).

Generated from 2010 through 2100					
Number of Assemblies			Mass of Assemblies (MT)		
PWR	BWR	Total	PWR	BWR	Total
274,876	353,824	628,700	118,196.68	63,688.32	181,885.00

Total Generated					
Number of Assemblies			Mass of Assemblies (MT)		
PWR	BWR	Total	PWR	BWR	Total
369,165	471,518	840,683	158,741	84,873	243,614



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- Total mass of ^{234}U , ^{235}U , ^{236}U , and ^{238}U discharged, Output Measure 2.2.2.3).

PWR Masses (MT)					BWR Masses (MT)				
U-234	U-235	U-236	U-238	Total	U-234	U-235	U-236	U-238	Total
27.5	1,197.6	928.2	146,179.4	148,332.7	13.9	314.0	70.0	78,842.9	79,240.8

Total Masses (MT)				
U-234	U-235	U-236	U-238	Total
41.5	1,511.7	998.1	225,022.2	227,573.5

- Total mass of ^{238}Pu , ^{239}Pu , ^{240}Pu , ^{241}Pu and ^{242}Pu discharged, Output Measure 2.2.2.4).

PWR Masses (MT)						BWR Masses (MT)					
Pu-238	Pu-239	Pu-240	Pu-241	Pu-242	Total	Pu-238	Pu-239	Pu-240	Pu-241	Pu-242	Total
53.6	950.7	462.0	54.4	148.3	1,669.0	20.6	334.9	226.5	18.4	79.5	679.8

Total Masses (MT)					
Pu-238	Pu-239	Pu-240	Pu-241	Pu-242	Total
74.2	1,285.6	688.5	72.8	227.8	2,348.8



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- Mass of fission products and minor actinides discharged, either total or by isotope, Output Measure 2.2.2.5).

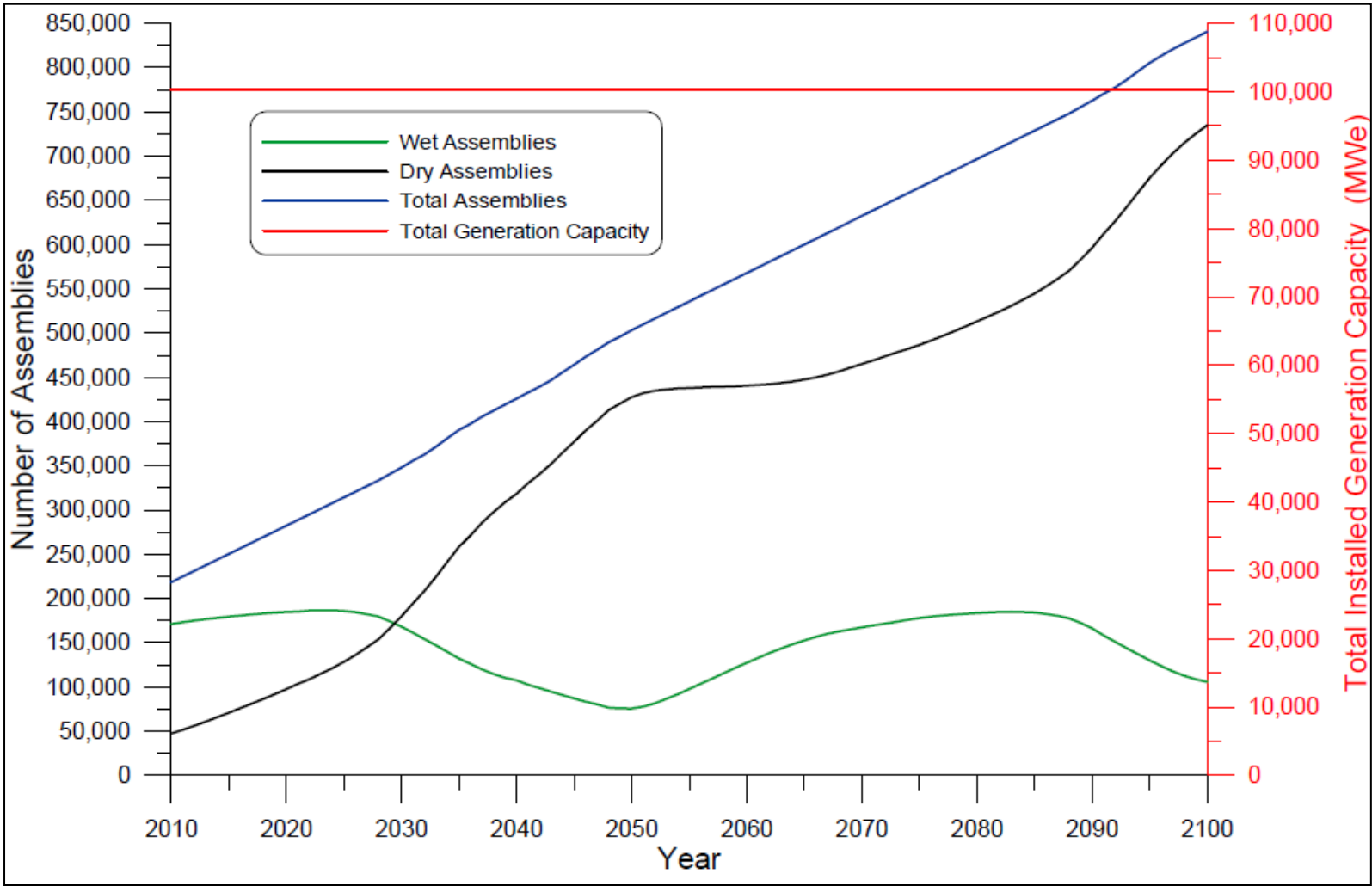
FP & Minor Actinides (MT)		
In PWR Assmblies	In BWR Assmblies	Total
8,739.3	4,952.6	13,691.9



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Graph 2.2



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