

Scenario 2.1

2.1.2.1)

Item	Number of Assemblies			Mass of Assemblies (MT)		
	PWR	BWR	Total	PWR	BWR	Total
NWTRB	94,289	117,694	211,983	40,544.3	21,184.9	61,729.2
NNL	N/A	N/A	N/A	38,964.3	20,410.9	59,375.2
INL	N/A	N/A	N/A	38,948.0	22,118.0	61,066.0
MIT	94,289	117,694	211,983	40,617.0	21,104.0	61,721.0
AREVA						

Check
61,729.2
61,624.8
61,065.2
61,725.1

2.1.2.2)

Item	PWR Masses (MT)						BWR Masses (MT)						Total Masses (MT)					
	U-234	U-235	U-236	U-238	Total	Enrich	U-234	U-235	U-236	U-238	Total	Enrich	U-234	U-235	U-236	U-238	Total	Enrich
NWTRB	6.7	327.3	187.3	37,934.8	38,456.1	0.85%	2.6	73.6	70.0	20,147.7	20,293.8	0.36%	9.3	400.8	257.3	58,082.5	58,749.9	0.68%
NNL	7.5	293.5	177.1	38,041.0	38,519.1	0.76%	2.6	85.9	65.5	20,062.0	20,216.0	0.42%	10.1	379.4	242.7	58,103.0	58,735.2	0.65%
INL	0.5	267.3	157.8	36,622.8	37,048.4	0.72%	0.2	151.8	79.5	20,921.1	21,152.6	0.72%	0.7	419.1	237.3	57,543.9	58,201.0	0.72%
MIT	6.0	308.5	181.4	38,055.4	38,551.2	0.80%	2.3	95.9	68.4	20,063.1	20,229.7	0.47%	8.3	404.4	249.8	58,118.5	58,780.9	0.69%
AREVA																		

2.1.2.3)

Item	PWR Masses (MT)							BWR Masses (MT)							Total Masses (MT)						
	Pu-238	Pu-239	Pu-240	Pu-241	Pu-242	Total	Quality	Pu-238	Pu-239	Pu-240	Pu-241	Pu-242	Total	Quality	Pu-238	Pu-239	Pu-240	Pu-241	Pu-242	Total	Quality
NWTRB	7.4	230.2	104.7	29.7	27.2	399.3	65.1%	1.9	79.9	51.0	9.9	13.7	156.4	57.4%	9.3	310.1	155.7	39.6	40.9	555.7	62.9%
NNL	6.2	226.3	105.9	30.7	24.8	393.9	65.2%	2.0	98.4	50.1	12.3	12.0	174.8	63.3%	8.2	324.7	156.0	43.1	36.8	568.8	64.7%
INL	6.4	205.1	96.3	33.4	23.7	364.9	65.4%	2.8	112.9	51.5	17.0	11.4	195.6	66.4%	9.2	318.0	147.8	50.4	35.1	560.5	65.7%
MIT	7.5	224.9	98.5	60.5	25.4	416.8	68.5%	2.6	87.5	49.6	22.4	12.2	174.2	63.1%	10.0	312.4	148.1	82.9	37.6	591.0	66.9%
AREVA																					

2.1.2.4)

Item	PWR Masses (MT)	BWR Masses (MT)	Total Masses (MT)
	FP & Minor Actinides	FP & Minor Actinides	FP & Minor Actinides
NWTRB	1,688.9	734.7	2,423.6
NNL	1,627.6	693.2	2,320.8
INL	1,534.4	769.3	2,303.7
MIT	1651.88	701.29	2353.17
AREVA			

Scenerio 2.2

2.2.2.1) & 2.2.2.2)

Item	In Storage Prior to 2010						Generated from 2010 through 2100						Total Generated					
	Number of Assemblies			Mass of Assemblies (MT)			Number of Assemblies			Mass of Assemblies (MT)			Number of Assemblies			Mass of Assemblies (MT)		
	PWR	BWR	Total	PWR	BWR	Total	PWR	BWR	Total	PWR	BWR	Total	PWR	BWR	Total	PWR	BWR	Total
NWTRB	94,289	117,694	211,983	40,544	21,185	61,729	274,876	353,824	628,700	118,197	63,688	181,885	369,165	471,518	840,683	158,741	84,873	243,614
NNL				40,592	21,104	61,696				100,946	53,298	154,244				141,537	74,402	215,939
INL				38,948.0	22,118.0	61,066				117,488	66,565	184,053				156,436	88,683	245,119
MIT	94,289	117,694	211,983				194,326	467,887	662,213				288,615	585,581	874,196	124,104	105,405	229,509
AREVA																		

Check
243,614
226,508
245,119
239,335

2.2.2.3)

Item	PWR Masses (MT)						BWR Masses (MT)						Total Masses (MT)					
	U-234	U-235	U-236	U-238	Total	Enrich	U-234	U-235	U-236	U-238	Total	Enrich	U-234	U-235	U-236	U-238	Total	Quality
NWTRB	27.5	1,197.6	928.2	146,179.4	148,332.7	0.81%	13.9	314.0	475.1	78,842.9	79,645.9	0.39%	41.5	1,511.7	1,403.2	225,022.2	227,978.6	0.66%
NNL	39.8	1,183.6	761.1	130,722.0	132,706.5	0.89%	18.1	419.4	376.0	69,307.7	70,121.2	0.60%	57.9	1,603.0	1,137.1	200,029.7	202,827.7	0.79%
INL	5.7	1,114.0	870.0	144,359.6	146,349.3	0.76%	3.1	631.5	483.1	81,960.6	83,078.3	0.76%	8.8	1,745.5	1,353.1	226,320.2	229,427.6	0.76%
MIT	26.0	1,193.3	954.4	146,195.1	148,368.7	0.80%	12.0	420.2	453.1	74,924.6	75,809.9	0.55%	38.0	1,613.5	1,407.5	221,119.7	224,178.6	0.72%
AREVA																		

2.2.2.4)

Item	PWR Masses (MT)							BWR Masses (MT)							Total Masses (MT)						
	Pu-238	Pu-239	Pu-240	Pu-241	Pu-242	Total	Quality	Pu-238	Pu-239	Pu-240	Pu-241	Pu-242	Total	Quality	Pu-238	Pu-239	Pu-240	Pu-241	Pu-242	Total	Quality
NWTRB	53.6	950.7	462.0	54.4	148.3	1,669.0	60.2%	20.6	334.9	226.5	18.4	79.5	679.8	52.0%	74.2	1,285.6	688.5	72.8	227.8	2,348.8	57.8%
NNL	26.6	881.0	406.0	30.0	115.7	1,459.3	62.4%	9.7	349.2	199.5	10.4	56.2	625.0	57.5%	36.3	1,230.2	605.5	40.4	171.9	2,084.3	61.0%
INL	45.3	896.9	448.5	133.5	136.0	1,660.2	62.1%	25.0	504.9	251.0	75.4	75.0	931.3	62.3%	70.3	1,401.8	699.5	208.9	211.0	2,591.5	62.2%
MIT	52.0	931.2	434.7	277.8	140.0	1,835.7	65.9%	22.9	361.2	220.8	105.3	70.9	781.2	59.7%	75.0	1,292.4	655.6	383.0	211.0	2,616.9	64.0%
AREVA																					

2.2.2.5)

Item	FP & Minor Actinides (MT)		
	In PWR Assmblies	In BWR Assmblies	Total
NWTRB	8,739	4,547	13,287
NNL	14,410	7,186	21,596
INL	8,426	4,673	13,100
MIT	8,425	4,115	12,540
AREVA			

Scenerio 2.3

1,500 MT/year

Item	Assemblies Disposed			MTU Disposed		
	PWR	BWR	Total	PWR	BWR	Total
NWRTB	138,285	175,164	313,449	59,463	31,530	90,992
NNL	131,922	207,040	338,962	56,727	37,267	93,994
INL						
MIT						
AREVA						

3,000 MT/year

Item	Assemblies Disposed			MTU Disposed		
	PWR	BWR	Total	PWR	BWR	Total
NWRTB	277,137	351,560	628,697	119,169	63,281	182,450
NNL	323,086	273,065	596,151	138,927	49,152	188,079
INL						
MIT						
AREVA						

Scenario 2.4

Scenario 1

Item	Mass FP (MT)	% Uranium Reduction	Natural Uranium				Separated Mass					Mass Tails (MT)		Total PWR Assemblies	Recycled PWR Assemblies	% Recycled Assemblies
			PWR UOX		BWR UOX		PWR UOX		PWR MOX			Fresh	Separated			
			Number	Enrichment	Number	Enrichment	Number	Enrichment	Number	% Pu	Pu Quality					
NWTRB	89	18.4%	2,151	4.40%	3,551	4.35%	399	5.0%	416	10.03%	61.85%	10,996	1,221	2,966	815	27.5%
NNL	90	20.8%	1,846	4.40%	3,288	4.34%	422	5.1%	458	9.90%	64.10%	9,947	1,296	2,725	880	32.3%
INL		3.8%														
MIT	87	15.2%	2,325		3,636		397		291			11,996	1,388	3,013	688	22.8%
AREVA		18.0%	2,123	4.40%	3,483	4.40%	326	5.0%	312	14.00%	63.20%	12,548	1,252	2,760	637	23.1%

Scenario 2

Item	Mass FP (MT)	% Uranium Reduction	Natural Uranium				Separated Mass					Mass Tails (MT)		Total PWR Assemblies	Recycled PWR Assemblies	% Recycled Assemblies
			PWR UOX		BWR UOX		PWR UOX		PWR MOX			Fresh	Separated			
			Number	Enrichment	Number	Enrichment	Number	Enrichment	Number	% Pu	Pu Quality					
NWTRB	89	16.6%	2,231	4.40%	3,551	4.35%	399	5.0%	336	11.50%	59.50%	10,950	1,221	2,966	735	24.8%
NNL	90	18.8%	1,931	4.40%	3,288	4.34%	422	5.1%	373	11.36%	62.09%	10,211	1,296	2,725	795	29.2%
INL		3.5%														
MIT	88	14.7%	2,348		3,636		397		268			12,067	1,388	3,013	665	22.1%
AREVA		16.0%	2,228	4.40%	3,483	4.40%	326	5.0%	286	14.00%	60.20%	12,929	1,254	2,840	612	21.5%

Scenario 3

Item	Mass FP (MT)	% Uranium Reduction	Natural Uranium				Separated Mass					Mass Tails (MT)		Total PWR Assemblies	Recycled PWR Assemblies	% Recycled Assemblies
			PWR UOX		BWR UOX		PWR UOX		PWR MOX			Fresh	Separated			
			Number	Enrichment	Number	Enrichment	Number	Enrichment	Number	% Pu	Pu Quality					
NWTRB	89	15.8%	2,266	4.40%	3,551	4.35%	399	5.0%	301	12.36%	58.37%	11,345	1,221	2,966	700	23.6%
NNL	90	18.1%	1,967	4.40%	3,288	4.34%	423	5.2%	336	12.19%	60.80%	10,324	1,296	2,725	758	27.8%
INL		3.2%														
MIT	89	14.4%	2,358		3,636		397		257			12,099	1,388	3,013	655	21.7%
AREVA		15.0%	2,263	4.40%	3,483	4.40%	326	5.0%	274	14.00%	58.90%	13,057	1,254	2,863	600	21.0%

Scenario 4

Item	Mass FP (MT)	% Uranium Reduction	Natural Uranium				Separated Mass					Mass Tails (MT)		Total PWR Assemblies	Recycled PWR Assemblies	% Recycled Assemblies
			PWR UOX		BWR UOX		PWR UOX		PWR MOX			Fresh	Separated			
			Number	Enrichment	Number	Enrichment	Number	Enrichment	Number	% Pu	Pu Quality					
NWTRB	178	36.8%	1,335	4.40%	3,551	4.35%	798	5.0%	833	10.03%	61.85%	8,515	2,441	2,966	1,631	55.0%
NNL	180	42.4%	966	4.41%	3,288	4.34%	844	5.2%	916	9.90%	64.10%	7,215	2,592	2,725	1,760	64.6%
INL		6.1%														
MIT	173	30.3%	1,637		3,636		794		582			9,851	2,777	3,013	1,376	45.7%
AREVA		34.0%	1,449	4.40%	3,483	4.40%	1,556	5.0%	593	14.00%	61.80%	10,057	2,505	3,597	2,149	59.7%

Scenario 5

Item	Mass FP (MT)	% Uranium Reduction	Natural Uranium				Separated Mass					Mass Tails (MT)		Total PWR Assemblies	Recycled PWR Assemblies	% Recycled Assemblies
			PWR UOX		BWR UOX		PWR UOX		PWR MOX			Fresh	Separated			
			Number	Enrichment	Number	Enrichment	Number	Enrichment	Number	% Pu	Pu Quality					
NWTRB	179	33.1%	1,496	4.40%	3,551	4.35%	798	5.0%	672	11.50%	59.50%	9,005	2,441	2,966	1,470	49.6%
NNL	180	38.2%	1,136	4.40%	3,288	4.34%	844	5.2%	745	11.36%	61.81%	7,743	2,592	2,725	1,590	58.3%
INL		4.6%														
MIT	176	29.3%	1,683		3,636		794		1,281			9,992	2,777	3,758	2,075	55.2%
AREVA		31.0%	1,567	4.40%	3,483	4.40%	1,561	5.0%	563	14.00%	59.70%	10,492	2,507	3,691	2,124	57.5%

Scenario 6

Item	Mass FP (MT)	% Uranium Reduction	Natural Uranium				Separated Mass					Mass Tails (MT)		Total PWR Assemblies	Recycled PWR Assemblies	% Recycled Assemblies
			PWR UOX		BWR UOX		PWR UOX		PWR MOX			Fresh	Separated			
			Number	Enrichment	Number	Enrichment	Number	Enrichment	Number	% Pu	Pu Quality					
NWTRB	179	31.6%	1,566	4.40%	3,551	4.35%	798	5.0%	602	12.36%	58.37%	9,217	2,441	2,966	1,400	47.2%
NNL	180	36.8%	1,209	4.41%	3,288	4.34%	845	5.1%	672	12.22%	60.91%	7,969	2,592	2,725	1,517	55.7%
INL		3.4%														
MIT	177	28.9%	1,703		3,636		795		515			10,057	2,777	3,013	1,310	43.5%
AREVA		30.0%	1,609	4.40%	3,483	4.40%	1,561	5.0%	549	14.00%	58.90%	10,647	2,507	3,719	2,110	56.7%

