SAS2H Number Density Worksheet:

Number Density = (mass/assembly) / (volume) * (Na) / (Aw) * correction to 96% density for fresh fuel

Avogadro's Number [Na] 0.602252

Atomic Weight [Aw]

Volume= PI X .468122 X .468122 X 360.172 X 208
= 51575.24014

SAS2H UO2 density=10.206

Isotope List:

U mass=.464kg
UO2 mass= 526.38 kg

Correction to 96% density
1.030928

	Element	Symbol	Isotope	MCNP ID	Atomic Weight	ORIGINS ID
8	Oxygen	O	O-16	8016.50C	15.994915	
42	Molybdenum	Mo	nat.	42000.50C	95.94	
		Mo	Mo-95	42095.50C	94.905839	mo 95
43	Technetium	Tc	Tc-99*	43099.50C	98.90627501	tc 99
44	Ruthenium	Ru	Ru-101	44101.50C	100.905576	ru101
45	Rhodium	Rh	Rh-103	45103.50C	102.905511	rh103
47	Silver	Ag	Ag-109	47109.50C	108.904756	ag109
48	Cadmium	Cd	nat.	48000.50C	112.4	
55	Cesium	Cs	Cs-133	55133.50C	132.905355	cs133
		Cs	Cs-135	55135.50C	134.90577	cs135
60	Neodymium	Nd	Nd-143	60143.50C	142.909779	nd143
		Nd	Nd-145	60145.50C	144.912538	nd145
62	Samarium	Sm	Sm-147	62147.50C	146.914887	sm147
		Sm	Sm-149	62149.50C	148.91718	sm149
		Sm	Sm-150	62150.50C	149.917276	sm150
		Sm	Sm-151	62151.50C	150.919919	sm151
		Sm	Sm-152	62152.50C	151.919756	sm152
63	Europium	Eu	Eu-151	63151.55C	150.919838	eu151
		Eu	Eu-153	63153.55C	152.921242	eu153
		Eu	Eu-154	63154.50C	153.923053	eu154
64	Gadolinium	Gd	nat.	64000.35C	157.25	
		Gd	Gd-155	64155.50C	154.922664	gd155
		Gd	Gd-157	64157.50C	156.924025	gd157
72	Hafnium	Hf	nat.	72000.50C	178.49	
92	Uranium	U	U-233	92233.50C	233.039522	u233
		U	U-234	92234.50C	234.040904	u234
		U	U-235	92235.50C	235.043915	u235
		U	U-236	92236.50C	236.045637	u236
		U	U-238	92238.50C	238.05077	u238
93	Neptunium	Np	Np-237	93237.55C	237.048056	np237
94	Plutonium	Pu	Pu-238	94238.50C	238.049511	pu238
		Pu	Pu-239	94239.55C	239.052165	pu239
		Pu	Pu-240	94240.50C	240.053882	pu240
		Pu	Pu-241	94241.50C	241.056737	pu241
		Pu	Pu-242	94242.50C	242.058725	pu242
		Pu	Pu-243	94243.35C	243.061972	pu243
95	Americium	Am	Am-241	95241.50C	241.056714	am241
		Am	Am-242m	95242.50C	242.059502	am242m
		Am	Am-243	95243.50C	243.061387	am243
96	Curium	Cm	Cm-243	96243.35C	243.06137	cm243
		Cm	Cm-245	96245.35C	245.065371	cm245
		Cm	Cm-248	96248.35C	248.0722	cm248

Number Density = grams/assembly / Assembly Volume * Avagadro's Number / Atomic Weight * (Density Correction to 96% TD) * (Isotopic Correction Factor)

For Time Effects Cases, the Isotopic Correction Factor is set to 1.0.

Time Effects Curve

BURNUP: PWR 20 GWd/MT
ENRICHMENT: 3.00%
DECAY TIME: 5 YEARS

PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
DECAY TIME: 5 YEARS
Volume 51575.24 pwr 3.0% 20 GW

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.050%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	2.31E+02	0.045%	1	98.90628	43099.50C	2.8116E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	106.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	7.38E+01	0.014%	1	146.9149	62147.50C	6.0472E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	5.97E+00	0.001%	1	150.9199	62151.50C	4.7620E-07
eu151	2.50E-01	0.000%	1	150.9198	63151.55C	1.9942E-08
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	1.69E+00	0.000%	1	154.9227	64155.50C	1.3132E-07
u233	1.20E-03	0.000%	1	233.0395	92233.50C	8.1989E-11
u234	8.17E+01	0.016%	1	234.0409	92234.50C	4.2024E-06
u235	6.30E+03	1.217%	1	235.0439	92235.50C	3.2267E-04
u236	1.41E+03	0.272%	1	236.0456	92236.50C	7.1910E-05
u238	4.42E+05	85.383%	1	238.0508	92238.50C	2.2352E-02
np237	1.29E+02	0.025%	1	237.0481	93237.55C	6.5512E-06
pu238	2.93E+01	0.006%	1	238.0495	94238.50C	1.4817E-06
pu239	2.63E+03	0.508%	1	239.0521	94239.55C	1.3244E-04
pu240	6.72E+02	0.130%	1	240.0539	94240.50C	3.3700E-05
pu241	3.18E+02	0.061%	1	241.0587	94241.50C	1.5881E-05
pu242	7.08E+01	0.014%	1	242.0587	94242.50C	3.5211E-06
am241	1.03E+02	0.020%	1	241.0567	95241.50C	5.1436E-06
am242m	4.21E-01	0.000%	1	242.0595	95242.50C	2.0938E-08
am243	1.01E+01	0.002%	1	243.0614	95243.50C	5.0023E-07
total	517670.442	100.00%			Total	7.005698E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29

Effective density = 10.03719

Time Effects Curve

BURNUP: PWR 20 GWd/MT
ENRICHMENT: 3.00%
DECAY TIME: 10 YEARS

PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
DECAY TIME: 10 YEARS
Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.049%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	2.31E+02	0.045%	1	98.90628	43099.50C	2.8116E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	106.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	8.54E+01	0.016%	1	146.9149	62147.50C	6.9977E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	5.74E+00	0.001%	1	150.9199	62151.50C	4.5786E-07
eu151	4.75E-01	0.000%	1	150.9198	63151.55C	3.7889E-08
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	2.47E+00	0.000%	1	154.9227	64155.50C	1.9193E-07

u233	1.40E-03	0.000%	1	233.0395	92233.50C	7.2321E-11
u234	8.28E+01	0.016%	1	234.0409	92234.50C	4.2590E-06
u235	6.30E+03	1.217%	1	235.0439	92235.50C	3.2267E-04
u236	1.41E+03	0.272%	1	236.0456	92236.50C	7.1910E-05
u238	4.42E+05	85.380%	1	238.0508	92238.50C	2.2352E-02
np237	1.30E+02	0.025%	1	237.0481	93237.55C	6.6019E-06
pu238	2.81E+01	0.005%	1	238.0495	94238.50C	1.4210E-06
pu239	2.63E+03	0.508%	1	239.0521	94239.55C	1.3244E-04
pu240	6.72E+02	0.130%	1	240.0539	94240.50C	3.3700E-05
pu241	2.50E+02	0.048%	1	241.0567	94241.50C	1.2485E-05
pu242	7.08E+01	0.014%	1	242.0587	94242.50C	3.5211E-06
am241	1.71E+02	0.033%	1	241.0567	95241.50C	8.5397E-06
am242m	4.11E-01	0.000%	1	242.0595	95242.50C	2.0440E-08
am243	1.01E+01	0.002%	1	243.0614	95243.50C	5.0023E-07
total	517683.707	100.00%			Total	7.005804E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29

Effective density = 10.03745

Time Effects Curve

BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 20 YEARS
DECAY TIME: 20 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.049%	1	15.99492	8016.50C	4.8947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	2.31E+02	0.045%	1	98.90628	43099.50C	2.8116E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4206E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.5864E-05
sm147	8.94E+01	0.017%	1	146.9149	62147.50C	7.3255E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	5.32E+00	0.001%	1	150.9199	62151.50C	4.2436E-07
eu151	9.01E-01	0.000%	1	150.9198	63151.55C	7.1869E-08
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.02E+00	0.001%	1	154.9227	64155.50C	2.3467E-07
u233	1.81E-03	0.000%	1	233.0395	92233.50C	9.3501E-11
u234	8.49E+01	0.016%	1	234.0409	92234.50C	4.3670E-06
u235	6.30E+03	1.217%	1	235.0439	92235.50C	3.2267E-04
u236	1.41E+03	0.272%	1	236.0456	92236.50C	7.1910E-05
u238	4.42E+05	85.380%	1	238.0508	92238.50C	2.2352E-02
np237	1.33E+02	0.026%	1	237.0481	93237.55C	6.7543E-06
pu238	2.60E+01	0.005%	1	238.0495	94238.50C	1.3148E-06
pu239	2.63E+03	0.508%	1	239.0521	94239.55C	1.3244E-04
pu240	6.71E+02	0.130%	1	240.0539	94240.50C	3.3650E-05
pu241	1.54E+02	0.030%	1	241.0567	94241.50C	7.6907E-06
pu242	7.08E+01	0.014%	1	242.0587	94242.50C	3.5211E-06
am241	2.63E+02	0.051%	1	241.0567	95241.50C	1.3134E-05
am242m	3.91E-01	0.000%	1	242.0595	95242.50C	1.9446E-08
am243	1.01E+01	0.002%	1	243.0614	95243.50C	5.0023E-07
total	517686.244	100.00%			Total	7.005831E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29

Effective density = 10.0375

Time Effects Curve

BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 50 YEARS

DECAY TIME: 50 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.049%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	2.31E+02	0.045%	1	98.90628	43099.50C	2.8116E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.60C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	4.22E+00	0.001%	1	150.9199	62151.50C	3.3661E-07
eu151	2.00E+00	0.000%	1	150.9198	63151.55C	1.5953E-07
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.18E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	3.16E-03	0.000%	1	233.0395	92233.50C	1.6324E-10
u234	9.03E+01	0.017%	1	234.0409	92234.50C	4.6447E-06
u235	6.30E+03	1.217%	1	235.0439	92235.50C	3.2267E-04
u236	1.42E+03	0.274%	1	236.0456	92236.50C	7.2420E-05
u238	4.42E+05	85.378%	1	238.0508	92238.50C	2.2352E-02
np237	1.49E+02	0.029%	1	237.0481	93237.55C	7.5669E-06
pu238	2.06E+01	0.004%	1	238.0495	94238.50C	1.0418E-06
pu239	2.63E+03	0.508%	1	239.0521	94239.55C	1.3244E-04
pu240	6.70E+02	0.129%	1	240.0539	94240.50C	3.3599E-05
pu241	3.62E+01	0.007%	1	241.0567	94241.50C	1.8078E-06
pu242	7.08E+01	0.014%	1	242.0587	94242.50C	3.5211E-06
am241	3.65E+02	0.071%	1	241.0567	95241.50C	1.8228E-05
am242m	3.38E-01	0.000%	1	242.0595	95242.50C	1.6810E-08
am243	1.00E+01	0.002%	1	243.0614	95243.50C	4.9528E-07
total	517695.751	100.00%			Total	7.005883E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29

Effective density = 10.03768

Time Effects Curve

BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 100 YEARS
DECAY TIME: 100 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.049%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	2.30E+02	0.044%	1	98.90628	43099.50C	2.7994E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.60C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	2.87E+00	0.001%	1	150.9199	62151.50C	2.2893E-07
eu151	3.35E+00	0.001%	1	150.9198	63151.55C	2.6722E-07
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.18E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	5.76E-03	0.000%	1	233.0395	92233.50C	2.9755E-10
u234	9.69E+01	0.019%	1	234.0409	92234.50C	4.9842E-06
u235	6.31E+03	1.219%	1	235.0439	92235.50C	3.2318E-04

u236	1.42E+03	0.274%	1	236.0456	92236.50C	7.2420E-05
u238	4.42E+05	85.379%	1	238.0508	92238.50C	2.2352E-02
np237	1.78E+02	0.034%	1	237.0481	93237.55C	9.0396E-06
pu238	1.39E+01	0.003%	1	238.0495	94238.50C	7.0293E-07
pu239	2.62E+03	0.506%	1	239.0521	94239.55C	1.3194E-04
pu240	6.66E+02	0.129%	1	240.0539	94240.50C	3.3399E-05
pu241	3.23E+00	0.001%	1	241.0567	94241.50C	1.6131E-07
pu242	7.06E+01	0.014%	1	242.0587	94242.50C	3.5211E-06
am241	3.68E+02	0.071%	1	241.0567	95241.50C	1.8378E-05
am242m	2.64E-01	0.000%	1	242.0595	95242.50C	1.3129E-08
am243	9.99E+00	0.002%	1	243.0614	95243.50C	4.9478E-07
total	517889.6	100.00%			Total	7.005849E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29

Effective density = 10.03756

Time Effects Curve

BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 200 YEARS
DECAY TIME: 200 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.049%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	2.30E+02	0.044%	1	98.90628	43099.50C	2.7994E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	1.33E+00	0.000%	1	150.9199	62151.50C	1.0609E-07
eu151	4.89E+00	0.001%	1	150.9198	63151.55C	3.9008E-07
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.18E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	1.23E-02	0.000%	1	233.0395	92233.50C	8.3539E-10
u234	1.04E+02	0.020%	1	234.0409	92234.50C	5.3494E-06
u235	6.31E+03	1.219%	1	235.0439	92235.50C	3.2318E-04
u236	1.43E+03	0.276%	1	236.0456	92236.50C	7.2930E-05
u238	4.42E+05	85.379%	1	238.0508	92238.50C	2.2352E-02
np237	2.32E+02	0.045%	1	237.0481	93237.55C	1.1762E-05
pu238	6.36E+00	0.001%	1	238.0495	94238.50C	3.2163E-07
pu239	2.62E+03	0.506%	1	239.0521	94239.55C	1.3194E-04
pu240	6.59E+02	0.127%	1	240.0539	94240.50C	3.3048E-05
pu241	2.58E-02	0.000%	1	241.0567	94241.50C	1.2884E-09
pu242	7.06E+01	0.014%	1	242.0587	94242.50C	3.5211E-06
am241	3.16E+02	0.061%	1	241.0567	95241.50C	1.5781E-05
am242m	1.62E-01	0.000%	1	242.0595	95242.50C	8.0567E-09
am243	9.90E+00	0.002%	1	243.0614	95243.50C	4.9033E-07
total	517890.77	100.00%			Total	7.005861E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29

Effective density = 10.03756

Time Effects Curve

BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 300 YEARS
DECAY TIME: 300 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density

O 16	62377.29	12.049%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.6413E-05
tc 99	2.30E+02	0.044%	1	98.90628	43099.50C	2.7994E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	6.15E-01	0.000%	1	150.9199	62151.50C	4.9056E-08
eu151	5.60E+00	0.001%	1	150.9198	63151.55C	4.4669E-07
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.18E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	2.04E-02	0.000%	1	233.0395	92233.50C	1.0538E-09
u234	1.08E+02	0.021%	1	234.0409	92234.50C	5.5552E-06
u235	6.32E+03	1.221%	1	235.0439	92235.50C	3.2369E-04
u236	1.43E+03	0.276%	1	236.0456	92236.50C	7.2930E-05
u238	4.42E+05	85.380%	1	238.0508	92238.50C	2.2352E-02
np237	2.78E+02	0.054%	1	237.0481	93237.55C	1.4118E-05
pu238	2.92E+00	0.001%	1	238.0495	94238.50C	1.4767E-07
pu239	2.61E+03	0.504%	1	239.0521	94239.55C	1.3144E-04
pu240	6.52E+02	0.126%	1	240.0539	94240.50C	3.2697E-05
pu241	2.80E-04	0.000%	1	241.0567	94241.50C	1.3983E-11
pu242	7.08E+01	0.014%	1	242.0587	94242.50C	3.5211E-06
am241	2.69E+02	0.052%	1	241.0567	95241.50C	1.3434E-05
am242m	9.88E-02	0.000%	1	242.0595	95242.50C	4.9136E-09
am243	9.80E+00	0.002%	1	243.0614	95243.50C	4.8537E-07
total	517683.144	100.00%			Total	7.005827E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2

= 62377.29

Effective density = 10.03744

Time Effects Curve

BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM

ENRICHMENT: 3.00% DECAY TIME: 400 YEARS

DECAY TIME: 400 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.049%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.6413E-05
tc 99	2.30E+02	0.044%	1	98.90628	43099.50C	2.7994E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	2.85E-01	0.000%	1	150.9199	62151.50C	2.2733E-08
eu151	5.93E+00	0.001%	1	150.9198	63151.55C	4.7301E-07
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.18E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	2.99E-02	0.000%	1	233.0395	92233.50C	1.5446E-09
u234	1.09E+02	0.021%	1	234.0409	92234.50C	5.6066E-06
u235	6.33E+03	1.223%	1	235.0439	92235.50C	3.2421E-04
u236	1.44E+03	0.278%	1	236.0456	92236.50C	7.3440E-05
u238	4.42E+05	85.380%	1	238.0508	92238.50C	2.2352E-02
np237	3.17E+02	0.061%	1	237.0481	93237.55C	1.6099E-05

pu238	1.35E+00	0.000%	1	238.0495	94238.50C	6.8270E-08
pu239	2.60E+03	0.502%	1	239.0521	94239.55C	1.3093E-04
pu240	6.46E+02	0.125%	1	240.0539	94240.50C	3.2396E-05
pu241	7.54E-05	0.000%	1	241.0567	94241.50C	3.7655E-12
pu242	7.06E+01	0.014%	1	242.0587	94242.50C	3.5211E-06
am241	2.30E+02	0.044%	1	241.0567	95241.50C	1.1486E-05
am242m	6.05E-02	0.000%	1	242.0595	95242.50C	3.0088E-09
am243	9.71E+00	0.002%	1	243.0614	95243.50C	4.8092E-07
total	517686.455	100.00%			Total	7.005849E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29

Effective density = 10.0375

Time Effects Curve

BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 500 YEARS
DECAY TIME: 500 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.049%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	2.30E+02	0.044%	1	98.90628	43099.50C	2.7994E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.8864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	1.32E-01	0.000%	1	150.9199	62151.50C	1.0529E-08
eu151	6.08E+00	0.001%	1	150.9198	63151.55C	4.8498E-07
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.18E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	4.06E-02	0.000%	1	233.0395	92233.50C	2.0973E-09
u234	1.10E+02	0.021%	1	234.0409	92234.50C	5.6580E-06
u235	6.34E+03	1.225%	1	235.0439	92235.50C	3.2472E-04
u236	1.45E+03	0.280%	1	236.0456	92236.50C	7.3950E-05
u238	4.42E+05	85.379%	1	238.0508	92238.50C	2.2352E-02
np237	3.51E+02	0.068%	1	237.0481	93237.55C	1.7825E-05
pu238	6.24E-01	0.000%	1	238.0495	94238.50C	3.1556E-08
pu239	2.59E+03	0.500%	1	239.0521	94239.55C	1.3043E-04
pu240	6.39E+02	0.123%	1	240.0539	94240.50C	3.2045E-05
pu241	7.32E-05	0.000%	1	241.0567	94241.50C	3.6556E-12
pu242	7.08E+01	0.014%	1	242.0587	94242.50C	3.5211E-06
am241	1.96E+02	0.038%	1	241.0567	95241.50C	9.7882E-06
am242m	3.70E-02	0.000%	1	242.0595	95242.50C	1.8401E-09
am243	9.62E+00	0.002%	1	243.0614	95243.50C	4.7648E-07
total	517689.624	100.00%			Total	7.005870E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29

Effective density = 10.03758

Time Effects Curve

BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 1000 YEARS
DECAY TIME: 1000 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.049%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	2.30E+02	0.044%	1	98.90628	43099.50C	2.7994E-05

ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	2.80E-03	0.000%	1	150.9199	62151.50C	2.2335E-10
eu151	6.21E+00	0.001%	1	150.9198	63151.55C	4.9535E-07
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.18E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	1.06E-01	0.000%	1	233.0395	92233.50C	5.4757E-09
u234	1.11E+02	0.021%	1	234.0409	92234.50C	5.7095E-06
u235	8.37E+03	1.230%	1	235.0439	92235.50C	3.2625E-04
u236	1.48E+03	0.286%	1	236.0456	92236.50C	7.5480E-05
u238	4.42E+05	85.380%	1	238.0508	92238.50C	2.2352E-02
np237	4.57E+02	0.088%	1	237.0481	93237.55C	2.3208E-05
pu238	1.53E-02	0.000%	1	238.0495	94238.50C	7.7373E-10
pu239	2.56E+03	0.495%	1	239.0521	94239.55C	1.2892E-04
pu240	6.06E+02	0.117%	1	240.0539	94240.50C	3.0390E-05
pu241	7.03E-05	0.000%	1	241.0567	94241.50C	3.5108E-12
pu242	7.07E+01	0.014%	1	242.0587	94242.50C	3.5161E-06
am241	8.77E+01	0.017%	1	241.0567	95241.50C	4.3797E-06
am242m	3.17E-03	0.000%	1	242.0595	95242.50C	1.5765E-10
am243	9.18E+00	0.002%	1	243.0614	95243.50C	4.5487E-07
total	517684.207	100.00%			Total	7.005857E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29

Effective density = 10.03746

Time Effects Curve

BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 4000 YEARS
DECAY TIME: 4000 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.050%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	2.28E+02	0.044%	1	98.90628	43099.50C	2.7751E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	2.58E-13	0.000%	1	150.9199	62151.50C	2.0580E-20
eu151	6.22E+00	0.001%	1	150.9198	63151.55C	4.9615E-07
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.18E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	8.03E-01	0.000%	1	233.0395	92233.50C	3.1150E-08
u234	1.10E+02	0.021%	1	234.0409	92234.50C	5.6580E-06
u235	6.58E+03	1.271%	1	235.0439	92235.50C	3.3701E-04
u236	1.64E+03	0.317%	1	236.0456	92236.50C	8.3840E-05
u238	4.42E+05	85.382%	1	238.0508	92238.50C	2.2352E-02
np237	5.42E+02	0.105%	1	237.0481	93237.55C	2.7525E-05
pu238	1.87E-09	0.000%	1	238.0495	94238.50C	8.4453E-17
pu239	2.35E+03	0.454%	1	239.0521	94239.55C	1.1834E-04
pu240	4.41E+02	0.085%	1	240.0539	94240.50C	2.2115E-05

pu241	5.50E-05	0.000%	1	241.0567	94241.50C	2.7467E-12
pu242	7.03E+01	0.014%	1	242.0587	94242.50C	3.4962E-06
am241	7.18E-01	0.000%	1	241.0567	95241.50C	3.5857E-08
am242m	1.25E-09	0.000%	1	242.0595	95242.50C	6.2166E-17
am243	6.92E+00	0.001%	1	243.0614	95243.50C	3.4273E-07
total	517672.051	100.00%			Total	7.005821E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29

Effective density = 10.03722

Time Effects Curve

BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 8000 YEARS
DECAY TIME: 8000 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.050%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	2.25E+02	0.043%	1	98.90628	43099.50C	2.7386E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	1.07E-26	0.000%	1	150.9199	62151.50C	8.5350E-34
eu151	6.22E+00	0.001%	1	150.9198	63151.55C	4.9615E-07
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.16E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	1.28E+00	0.000%	1	233.0395	92233.50C	6.6122E-08
u234	1.09E+02	0.021%	1	234.0409	92234.50C	5.6068E-06
u235	6.83E+03	1.319%	1	235.0439	92235.50C	3.4981E-04
u236	1.79E+03	0.346%	1	236.0456	92236.50C	9.1290E-05
u238	4.42E+05	85.384%	1	238.0508	92238.50C	2.2352E-02
np237	5.42E+02	0.105%	1	237.0481	93237.55C	2.7525E-05
pu238	4.83E-18	0.000%	1	238.0495	94238.50C	2.4426E-25
pu239	2.10E+03	0.406%	1	239.0521	94239.55C	1.0575E-04
pu240	2.89E+02	0.056%	1	240.0539	94240.50C	1.4493E-05
pu241	3.97E-05	0.000%	1	241.0567	94241.50C	1.9826E-12
pu242	6.98E+01	0.013%	1	242.0587	94242.50C	3.4714E-06
am241	2.43E-03	0.000%	1	241.0567	95241.50C	1.2135E-10
am242m	3.60E-16	0.000%	1	242.0595	95242.50C	1.7904E-25
am243	4.75E+00	0.001%	1	243.0614	95243.50C	2.3526E-07
total	517683.342	100.00%			Total	7.005790E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29

Effective density = 10.03705

Time Effects Curve

BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 10000 YEARS
DECAY TIME: 10000 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.050%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	2.23E+02	0.043%	1	98.90628	43099.50C	2.7142E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06

nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	2.19E-33	0.000%	1	150.9199	62151.50C	1.7469E-40
eu151	6.22E+00	0.001%	1	150.9198	63151.55C	4.9615E-07
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.18E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	1.61E+00	0.000%	1	233.0395	92233.50C	8.3169E-08
u234	1.08E+02	0.021%	1	234.0409	92234.50C	5.5552E-06
u235	6.95E+03	1.343%	1	235.0439	92235.50C	3.5596E-04
u236	1.84E+03	0.355%	1	236.0456	92236.50C	9.3840E-05
u238	4.42E+05	85.385%	1	238.0508	92238.50C	2.2352E-02
np237	5.41E+02	0.105%	1	237.0481	93237.55C	2.7474E-05
pu238	2.60E-22	0.000%	1	238.0495	94238.50C	1.3146E-29
pu239	1.98E+03	0.382%	1	239.0521	94239.55C	9.9710E-05
pu240	2.34E+02	0.045%	1	240.0539	94240.50C	1.1735E-05
pu241	3.37E-05	0.000%	1	241.0567	94241.50C	1.6830E-12
pu242	6.96E+01	0.013%	1	242.0587	94242.50C	3.4814E-06
am241	1.11E-03	0.000%	1	241.0567	95241.50C	5.5433E-11
am242m	1.93E-22	0.000%	1	242.0595	95242.50C	9.5984E-30
am243	3.94E+00	0.001%	1	243.0614	95243.50C	1.9514E-07
total	517653.661	100.00%			Total	7.005741E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29

Effective density = 10.03688

Time Effects Curve

BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 14000 YEARS
DECAY TIME: 14000 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.050%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	2.20E+02	0.042%	1	98.90628	43099.50C	2.6777E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	0.00E+00	0.000%	1	150.9199	62151.50C	0.0000E+00
eu151	6.22E+00	0.001%	1	150.9198	63151.55C	4.9615E-07
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.18E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	2.26E+00	0.000%	1	233.0395	92233.50C	1.1675E-07
u234	1.07E+02	0.021%	1	234.0409	92234.50C	5.5037E-06
u235	7.16E+03	1.383%	1	235.0439	92235.50C	3.6672E-04
u236	1.92E+03	0.371%	1	236.0456	92236.50C	9.7920E-05
u238	4.42E+05	85.386%	1	238.0508	92238.50C	2.2352E-02
np237	5.41E+02	0.105%	1	237.0481	93237.55C	2.7474E-05
pu238	7.49E-31	0.000%	1	238.0495	94238.50C	3.7877E-38
pu239	1.77E+03	0.342%	1	239.0521	94239.55C	8.9135E-05
pu240	1.53E+02	0.030%	1	240.0539	94240.50C	7.6727E-06
pu241	2.43E-05	0.000%	1	241.0567	94241.50C	1.2135E-12
pu242	6.91E+01	0.013%	1	242.0587	94242.50C	3.4365E-06
am241	7.66E-04	0.000%	1	241.0567	95241.50C	3.8254E-11

am242m	5.57E-31	0.000%	1	242.0595	95242.50C	2.7701E-38
am243	2.70E+00	0.001%	1	243.0614	95243.50C	1.3373E-07
total	517647.571	100.00%			Total	7.005714E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29

Effective density = 10.03675

Time Effects Curve

BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 18000 YEARS
DECAY TIME: 18000 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.050%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	2.17E+02	0.042%	1	98.90628	43099.50C	2.6412E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	0.00E+00	0.000%	1	150.9199	62151.50C	0.0000E+00
eu151	6.22E+00	0.001%	1	150.9198	63151.55C	4.9615E-07
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.18E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	2.91E+00	0.001%	1	233.0395	92233.50C	1.5032E-07
u234	1.07E+02	0.021%	1	234.0409	92234.50C	5.5037E-06
u235	7.35E+03	1.420%	1	235.0439	92235.50C	3.7845E-04
u236	1.98E+03	0.383%	1	236.0456	92236.50C	1.0098E-04
u238	4.42E+05	85.387%	1	238.0508	92238.50C	2.2352E-02
np237	5.40E+02	0.104%	1	237.0481	93237.55C	2.7423E-05
pu238	2.18E-39	0.000%	1	238.0495	94238.50C	1.0923E-48
pu239	1.57E+03	0.303%	1	239.0521	94239.55C	7.9063E-05
pu240	1.01E+02	0.020%	1	240.0539	94240.50C	5.0650E-06
pu241	1.76E-05	0.000%	1	241.0567	94241.50C	8.7894E-13
pu242	6.65E+01	0.013%	1	242.0587	94242.50C	3.4067E-06
am241	5.52E-04	0.000%	1	241.0567	95241.50C	2.7567E-11
am242m	1.81E-39	0.000%	1	242.0595	95242.50C	8.0070E-47
am243	1.86E+00	0.000%	1	243.0614	95243.50C	9.2122E-08
total	517640.781	100.00%			Total	7.005680E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29

Effective density = 10.03681

Time Effects Curve

BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 22000 YEARS
DECAY TIME: 22000 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.051%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	2.14E+02	0.041%	1	98.90628	43099.50C	2.6047E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06

sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	0.00E+00	0.000%	1	150.9199	62151.50C	0.0000E+00
eu151	6.22E+00	0.001%	1	150.9198	63151.55C	4.9615E-07
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9836E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.18E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	3.54E+00	0.001%	1	233.0395	92233.50C	1.8287E-07
u234	1.06E+02	0.020%	1	234.0409	92234.50C	5.4523E-06
u235	7.52E+03	1.453%	1	235.0439	92235.50C	3.8515E-04
u236	2.01E+03	0.388%	1	236.0456	92236.50C	1.0251E-04
u238	4.42E+05	85.389%	1	238.0508	92238.50C	2.2352E-02
np237	5.39E+02	0.104%	1	237.0481	93237.55C	2.7373E-05
pu238	0.00E+00	0.000%	1	238.0495	94238.50C	0.0000E+00
pu239	1.40E+03	0.270%	1	239.0521	94239.55C	7.0502E-05
pu240	6.59E+01	0.013%	1	240.0539	94240.50C	3.3048E-06
pu241	1.27E-05	0.000%	1	241.0567	94241.50C	6.3423E-13
pu242	6.80E+01	0.013%	1	242.0587	94242.50C	3.3818E-06
am241	3.99E-04	0.000%	1	241.0567	95241.50C	1.9926E-11
am242m	0.00E+00	0.000%	1	242.0595	95242.50C	0.0000E+00
am243	1.27E+00	0.000%	1	243.0614	95243.50C	6.2900E-08
total	517630.22	100.00%			Total	7.005623E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29

Effective density = 10.03641

Time Effects Curve
BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 26000 YEARS
DECAY TIME: 26000 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.051%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	2.12E+02	0.041%	1	98.90628	43099.50C	2.5803E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	0.00E+00	0.000%	1	150.9199	62151.50C	0.0000E+00
eu151	6.22E+00	0.001%	1	150.9198	63151.55C	4.9615E-07
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9836E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.18E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	4.16E+00	0.001%	1	233.0395	92233.50C	2.1490E-07
u234	1.05E+02	0.020%	1	234.0409	92234.50C	5.4009E-06
u235	7.67E+03	1.482%	1	235.0439	92235.50C	3.9284E-04
u236	2.03E+03	0.392%	1	236.0456	92236.50C	1.0353E-04
u238	4.42E+05	85.390%	1	238.0508	92238.50C	2.2352E-02
np237	5.39E+02	0.104%	1	237.0481	93237.55C	2.7373E-05
pu238	0.00E+00	0.000%	1	238.0495	94238.50C	0.0000E+00
pu239	1.25E+03	0.241%	1	239.0521	94239.55C	6.2948E-05
pu240	4.32E+01	0.008%	1	240.0539	94240.50C	2.1664E-06
pu241	9.14E-06	0.000%	1	241.0567	94241.50C	4.5645E-13
pu242	6.75E+01	0.013%	1	242.0587	94242.50C	3.3570E-06
am241	2.88E-04	0.000%	1	241.0567	95241.50C	1.4383E-11
am242m	0.00E+00	0.000%	1	242.0595	95242.50C	0.0000E+00
am243	8.74E-01	0.000%	1	243.0614	95243.50C	4.3287E-08
total	517624.244	100.00%			Total	7.005593E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29
Effective density = 10.03629

Time Effects Curve
BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 30000 YEARS
DECAY TIME: 30000 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.051%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	2.09E+02	0.040%	1	98.90628	43099.50C	2.5438E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	0.00E+00	0.000%	1	150.9199	62151.50C	0.0000E+00
eu151	6.22E+00	0.001%	1	150.9198	63151.55C	4.9615E-07
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.18E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	4.77E+00	0.001%	1	233.0395	92233.50C	2.4841E-07
u234	1.04E+02	0.020%	1	234.0409	92234.50C	5.3494E-06
u235	7.80E+03	1.507%	1	235.0439	92235.50C	3.9949E-04
u236	2.05E+03	0.396%	1	236.0456	92236.50C	1.0455E-04
u238	4.42E+05	85.390%	1	238.0508	92238.50C	2.2352E-02
np237	5.38E+02	0.104%	1	237.0481	93237.55C	2.7322E-05
pu238	0.00E+00	0.000%	1	238.0495	94238.50C	0.0000E+00
pu239	1.12E+03	0.216%	1	239.0521	94239.55C	5.6401E-05
pu240	2.83E+01	0.005%	1	240.0539	94240.50C	1.4192E-06
pu241	6.60E-06	0.000%	1	241.0567	94241.50C	3.2960E-13
pu242	6.70E+01	0.013%	1	242.0587	94242.50C	3.3321E-06
am241	2.08E-04	0.000%	1	241.0567	95241.50C	1.0387E-11
am242m	0.00E+00	0.000%	1	242.0595	95242.50C	0.0000E+00
am243	8.00E-01	0.000%	1	243.0614	95243.50C	2.9717E-08
total	517624.18	100.00%			Total	7.005584E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29
Effective density = 10.03629

Time Effects Curve
BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 36000 YEARS
DECAY TIME: 36000 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.051%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	2.05E+02	0.040%	1	98.90628	43099.50C	2.4951E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	0.00E+00	0.000%	1	150.9199	62151.50C	0.0000E+00

eu151	6.22E+00	0.001%	1	150.9198	63151.55C	4.9615E-07
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.18E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	5.66E+00	0.001%	1	233.0395	92233.50C	2.9238E-07
u234	1.02E+02	0.020%	1	234.0409	92234.50C	5.2465E-06
u235	7.97E+03	1.540%	1	235.0439	92235.50C	4.0820E-04
u236	2.06E+03	0.398%	1	236.0456	92236.50C	1.0506E-04
u238	4.42E+05	85.394%	1	238.0508	92238.50C	2.2352E-02
np237	5.37E+02	0.104%	1	237.0481	93237.55C	2.7271E-05
pu238	0.00E+00	0.000%	1	238.0495	94238.50C	0.0000E+00
pu239	9.39E+02	0.181%	1	239.0521	94239.55C	4.7287E-05
pu240	1.50E+01	0.003%	1	240.0539	94240.50C	7.5223E-07
pu241	4.04E-06	0.000%	1	241.0567	94241.50C	2.0176E-13
pu242	6.63E+01	0.013%	1	242.0587	94242.50C	3.2973E-06
am241	1.28E-04	0.000%	1	241.0567	95241.50C	6.3923E-12
am242m	0.00E+00	0.000%	1	242.0595	95242.50C	0.0000E+00
am243	3.41E-01	0.000%	1	243.0614	95243.50C	1.6869E-08
total	517802.811	100.00%			Total	7.005463E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29

Effective density = 10.03568

Time Effects Curve

BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 45000 YEARS
DECAY TIME: 45000 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.051%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	1.99E+02	0.038%	1	98.90628	43099.50C	2.4221E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	0.00E+00	0.000%	1	150.9199	62151.50C	0.0000E+00
eu151	6.22E+00	0.001%	1	150.9198	63151.55C	4.9615E-07
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.18E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	6.95E+00	0.001%	1	233.0395	92233.50C	3.5902E-07
u234	1.00E+02	0.019%	1	234.0409	92234.50C	5.1437E-06
u235	8.18E+03	1.580%	1	235.0439	92235.50C	4.1896E-04
u236	2.07E+03	0.400%	1	236.0456	92236.50C	1.0557E-04
u238	4.42E+05	85.396%	1	238.0508	92238.50C	2.2352E-02
np237	5.35E+02	0.103%	1	237.0481	93237.55C	2.7170E-05
pu238	0.00E+00	0.000%	1	238.0495	94238.50C	0.0000E+00
pu239	7.25E+02	0.140%	1	239.0521	94239.55C	3.6510E-05
pu240	5.81E+00	0.001%	1	240.0539	94240.50C	2.9136E-07
pu241	1.94E-06	0.000%	1	241.0567	94241.50C	9.8883E-14
pu242	6.52E+01	0.013%	1	242.0587	94242.50C	3.2426E-06
am241	5.86E-05	0.000%	1	241.0567	95241.50C	2.9285E-12
am242m	0.00E+00	0.000%	1	242.0595	95242.50C	0.0000E+00
am243	1.46E-01	0.000%	1	243.0614	95243.50C	7.2311E-09
total	517589.616	100.00%			Total	7.005373E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29

Effective density = 10.03562

Time Effects Curve
BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 60000 YEARS
DECAY TIME: 60000 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.052%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	1.89E+02	0.037%	1	98.90628	43099.50C	2.3004E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	0.00E+00	0.000%	1	150.9199	62151.50C	0.0000E+00
eu151	6.22E+00	0.001%	1	150.9198	63151.55C	4.9615E-07
sm152	3.74E+01	0.007%	1	151.9196	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.18E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	8.96E+00	0.002%	1	233.0395	92233.50C	4.6389E-07
u234	9.73E+01	0.019%	1	234.0409	92234.50C	5.0048E-06
u235	8.43E+03	1.629%	1	235.0439	92235.50C	4.3176E-04
u236	2.07E+03	0.400%	1	236.0456	92236.50C	1.0557E-04
u238	4.42E+05	85.400%	1	238.0508	92238.50C	2.2352E-02
np237	5.33E+02	0.103%	1	237.0481	93237.55C	2.7088E-05
pu238	0.00E+00	0.000%	1	238.0495	94238.50C	0.0000E+00
pu239	4.71E+02	0.091%	1	239.0521	94239.55C	2.3719E-05
pu240	1.19E+00	0.000%	1	240.0539	94240.50C	5.9677E-08
pu241	5.71E-07	0.000%	1	241.0567	94241.50C	2.8516E-14
pu242	6.34E+01	0.012%	1	242.0587	94242.50C	3.1531E-06
am241	1.72E-05	0.000%	1	241.0567	95241.50C	8.5896E-13
am242m	0.00E+00	0.000%	1	242.0595	95242.50C	0.0000E+00
am243	3.57E-02	0.000%	1	243.0614	95243.50C	1.7681E-09
total	517566.416	100.00%			Total	7.005206E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29
Effective density = 10.03517

Time Effects Curve
BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 100000 YEARS
DECAY TIME: 100000 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.053%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	1.66E+02	0.032%	1	98.90628	43099.50C	2.0205E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	0.00E+00	0.000%	1	150.9199	62151.50C	0.0000E+00
eu151	6.22E+00	0.001%	1	150.9198	63151.55C	4.9615E-07
sm152	3.74E+01	0.007%	1	151.9196	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06

gd155	3.18E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	1.37E+01	0.003%	1	233.0395	92233.50C	7.0771E-07
u234	8.94E+01	0.017%	1	234.0409	92234.50C	4.5964E-06
u235	8.75E+03	1.691%	1	235.0439	92235.50C	4.4815E-04
u236	2.07E+03	0.400%	1	236.0456	92236.50C	1.0567E-04
u238	4.42E+05	85.406%	1	238.0508	92238.50C	2.2352E-02
np237	5.26E+02	0.102%	1	237.0481	93237.55C	2.6713E-05
pu238	0.00E+00	0.000%	1	238.0495	94238.50C	0.0000E+00
pu239	1.49E+02	0.029%	1	239.0521	94239.55C	7.5034E-06
pu240	1.74E-02	0.000%	1	240.0539	94240.50C	8.7258E-10
pu241	2.19E-08	0.000%	1	241.0567	94241.50C	1.0937E-15
pu242	5.89E+01	0.011%	1	242.0587	94242.50C	2.9293E-06
am241	6.59E-07	0.000%	1	241.0567	95241.50C	3.2910E-14
am242m	0.00E+00	0.000%	1	242.0595	95242.50C	0.0000E+00
am243	8.30E-04	0.000%	1	243.0614	95243.50C	4.1108E-11
total	517525.528	100.00%			Total	7.004864E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29

Effective density = 10.03438

Time Effects Curve

BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM

ENRICHMENT: 3.00% DECAY TIME: 250000 YEARS

DECAY TIME: 250000 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.056%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	1.01E+02	0.020%	1	98.90628	43099.50C	1.2293E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	106.9048	47109.50C	2.4208E-06
nd143	2.89E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	0.00E+00	0.000%	1	150.9199	62151.50C	0.0000E+00
eu151	8.22E+00	0.001%	1	150.9198	63151.55C	4.9615E-07
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.18E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	2.51E+01	0.005%	1	233.0395	92233.50C	1.2966E-06
u234	6.68E+01	0.013%	1	234.0409	92234.50C	3.4360E-06
u235	8.89E+03	1.718%	1	235.0439	92235.50C	4.5532E-04
u236	2.06E+03	0.398%	1	236.0456	92236.50C	1.0506E-04
u238	4.42E+05	85.428%	1	238.0508	92238.50C	2.2352E-02
np237	5.01E+02	0.097%	1	237.0481	93237.55C	2.5443E-05
pu238	0.00E+00	0.000%	1	238.0495	94238.50C	0.0000E+00
pu239	2.00E+00	0.000%	1	239.0521	94239.55C	1.0072E-07
pu240	2.34E-09	0.000%	1	240.0539	94240.50C	1.1735E-16
pu241	1.06E-13	0.000%	1	241.0567	94241.50C	5.2936E-21
pu242	4.46E+01	0.009%	1	242.0587	94242.50C	2.2181E-06
am241	3.20E-12	0.000%	1	241.0567	95241.50C	1.5981E-19
am242m	0.00E+00	0.000%	1	242.0595	95242.50C	0.0000E+00
am243	1.52E-08	0.000%	1	243.0614	95243.50C	7.5282E-16
total	517393.01	100.00%			Total	7.003743E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29

Effective density = 10.03181

Time Effects Curve

BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM

ENRICHMENT: 3.00% DECAY TIME: 500000 YEARS
DECAY TIME: 500000 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.059%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	4.46E+01	0.009%	1	98.90628	43099.50C	5.4285E-06
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.8846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.8864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	0.00E+00	0.000%	1	150.9199	62151.50C	0.0000E+00
eu151	6.22E+00	0.001%	1	150.9198	63151.55C	4.9615E-07
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.18E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	3.18E+01	0.006%	1	233.0395	92233.50C	1.8324E-06
u234	4.51E+01	0.009%	1	234.0409	92234.50C	2.3198E-06
u235	8.89E+03	1.719%	1	235.0439	92235.50C	4.5532E-04
u236	2.05E+03	0.396%	1	236.0456	92236.50C	1.0455E-04
u238	4.42E+05	85.451%	1	238.0508	92238.50C	2.2352E-02
np237	4.62E+02	0.089%	1	237.0481	93237.55C	2.3462E-05
pu238	0.00E+00	0.000%	1	238.0495	94238.50C	0.0000E+00
pu239	1.51E-03	0.000%	1	239.0521	94239.55C	7.6041E-11
pu240	7.61E-11	0.000%	1	240.0539	94240.50C	3.8163E-18
pu241	1.48E-22	0.000%	1	241.0567	94241.50C	7.3911E-30
pu242	2.80E+01	0.005%	1	242.0587	94242.50C	1.3925E-06
am241	4.70E-21	0.000%	1	241.0567	95241.50C	2.3472E-28
am242m	0.00E+00	0.000%	1	242.0595	95242.50C	0.0000E+00
am243	1.44E-08	0.000%	1	243.0614	95243.50C	7.1320E-16
total	517253.812	100.00%			Total	7.002836E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29
Effective density = 10.02911

Time Effects Curve
BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 999999 YEARS
DECAY TIME: 999999 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.063%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	8.64E+00	0.002%	1	98.90628	43099.50C	1.0516E-06
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.8846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.8864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	0.00E+00	0.000%	1	150.9199	62151.50C	0.0000E+00
eu151	6.22E+00	0.001%	1	150.9198	63151.55C	4.9615E-07
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.18E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	3.05E+01	0.006%	1	233.0395	92233.50C	1.5756E-06
u234	2.91E+01	0.006%	1	234.0409	92234.50C	1.4968E-06

u235	8.89E+03	1.719%	1	235.0439	92235.50C	4.5532E-04
u236	2.01E+03	0.389%	1	236.0456	92236.50C	1.0251E-04
u238	4.42E+05	85.481%	1	238.0508	92238.50C	2.2352E-02
np237	3.93E+02	0.076%	1	237.0481	93237.55C	1.9958E-05
pu238	0.00E+00	0.000%	1	238.0495	94238.50C	0.0000E+00
pu239	4.61E-08	0.000%	1	239.0521	94239.55C	2.3215E-15
pu240	1.03E-10	0.000%	1	240.0539	94240.50C	5.1653E-18
pu241	0.00E+00	0.000%	1	241.0567	94241.50C	0.0000E+00
pu242	1.11E+01	0.002%	1	242.0587	94242.50C	5.5204E-07
am241	9.14E-39	0.000%	1	241.0567	95241.50C	4.5645E-46
am242m	0.00E+00	0.000%	1	242.0595	95242.50C	0.0000E+00
am243	1.41E-08	0.000%	1	243.0614	95243.50C	6.9834E-16
total	517074.85	100.00%			Total	7.001472E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29
Effective density = 10.02564

Time Effects Curve
BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 70000 YEARS
DECAY TIME: 70000 YEARS Volume 51575.24 pwr 3.0% 20 GWd/MT

ISOTOPE	GRAMS/Ass	%		Aw	MCNP ID	Number Density
O 16	62377.29	12.052%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	1.83E+02	0.035%	1	98.90628	43099.50C	2.2274E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.6008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6846E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2660E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	8.97E+01	0.017%	1	146.9149	62147.50C	7.3501E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	0.00E+00	0.000%	1	150.9199	62151.50C	0.0000E+00
eu151	6.22E+00	0.001%	1	150.9198	63151.55C	4.9615E-07
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	3.18E+00	0.001%	1	154.9227	64155.50C	2.4710E-07
u233	1.03E+01	0.002%	1	233.0395	92233.50C	5.3208E-07
u234	9.52E+01	0.018%	1	234.0409	92234.50C	4.8968E-06
u235	8.55E+03	1.652%	1	235.0439	92235.50C	4.3791E-04
u236	2.07E+03	0.400%	1	236.0456	92236.50C	1.0557E-04
u238	4.42E+05	85.401%	1	238.0508	92238.50C	2.2352E-02
np237	5.31E+02	0.103%	1	237.0481	93237.55C	2.6966E-05
pu238	0.00E+00	0.000%	1	238.0495	94238.50C	0.0000E+00
pu239	3.54E+02	0.068%	1	239.0521	94239.55C	1.7827E-05
pu240	4.14E-01	0.000%	1	240.0539	94240.50C	2.0761E-08
pu241	2.53E-07	0.000%	1	241.0567	94241.50C	1.2635E-14
pu242	6.22E+01	0.012%	1	242.0587	94242.50C	3.0934E-06
am241	7.82E-06	0.000%	1	241.0567	95241.50C	3.8054E-13
am242m	0.00E+00	0.000%	1	242.0595	95242.50C	0.0000E+00
am243	1.39E-02	0.000%	1	243.0614	95243.50C	6.8844E-10
total	517558.838	100.00%			Total	7.005135E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
= 62377.29
Effective density = 10.03502

Time Effects Curve

BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 1 YEARS
DECAY TIME: 1 YEARS Volume 51575.24 pwr 3.0% 20 G

ISOTOPE	GRAMS/As	%		Aw	MCNP ID	MCNP ID Density
O 16	62377.29	12.050%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	1	94.90584	42095.50C	2.8413E-05
tc 99	2.31E+02	0.045%	1	98.90628	43099.50C	2.8116E-05
ru101	2.18E+02	0.042%	1	100.9056	44101.50C	2.5008E-05
rh103	1.44E+02	0.028%	1	102.9055	45103.50C	1.6848E-05
ag109	2.19E+01	0.004%	1	108.9048	47109.50C	2.4208E-06
nd143	2.69E+02	0.052%	1	142.9098	60143.50C	2.2680E-05
nd145	2.03E+02	0.039%	1	144.9125	60145.50C	1.6864E-05
sm147	4.40E+01	0.009%	1	146.9149	62147.50C	3.6054E-06
sm149	1.42E+00	0.000%	1	148.9172	62149.50C	1.1479E-07
sm150	8.04E+01	0.016%	1	149.9173	62150.50C	6.4561E-06
sm151	6.15E+00	0.001%	1	150.9199	62151.50C	4.9056E-07
eu151	6.30E-02	0.000%	1	150.9198	63151.55C	5.0253E-09
sm152	3.74E+01	0.007%	1	151.9198	62152.50C	2.9636E-06
eu153	2.70E+01	0.005%	1	152.9212	63153.55C	2.1255E-06
gd155	4.83E-01	0.000%	1	154.9227	64155.50C	3.7532E-08
u233	1.02E-03	0.000%	1	233.0395	92233.50C	5.2691E-11
u234	8.08E+01	0.016%	1	234.0409	92234.50C	4.1561E-06
u235	6.30E+03	1.217%	1	235.0439	92235.50C	3.2267E-04
u236	1.41E+03	0.272%	1	236.0456	92236.50C	7.1910E-05
u238	4.42E+05	85.368%	1	238.0508	92238.50C	2.2352E-02
np237	1.26E+02	0.025%	1	237.0481	93237.55C	6.5004E-06
pu238	2.96E+01	0.006%	1	238.0495	94238.50C	1.4969E-06
pu239	2.63E+03	0.508%	1	239.0521	94239.55C	1.3244E-04
pu240	6.72E+02	0.130%	1	240.0539	94240.50C	3.3700E-05
pu241	3.86E+02	0.075%	1	241.0567	94241.50C	1.9277E-05
pu242	7.08E+01	0.014%	1	242.0587	94242.50C	3.5211E-06
am241	3.61E+01	0.007%	1	241.0567	95241.50C	1.8028E-06
am242m	4.30E-01	0.000%	1	242.0595	95242.50C	2.1385E-08
am243	1.01E+01	0.002%	1	243.0614	95243.50C	5.0023E-07
total	517638.94	100.00%			Total	7.005442E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
62377.29
Effective density = 10.03658

Best Estimate fbuc Best Estimate fbuc

BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 5 YEARS
DECAY TIME: 5 YEARS Volume 51575.24 pwr 3.0% 20 G

ISOTOPE	GRAMS/	%	% best f	Aw	MCNP ID	Number Density
O 16	62377.29	12.050%	1	15.99492	8016.50C	4.6947E-02
mo 95	2.24E+02	0.043%	0.641	94.90584	42095.50C	1.8213E-05
tc 99	2.31E+02	0.045%	0.641	98.90628	43099.50C	1.8022E-05
ru101	2.18E+02	0.042%	0.641	100.9056	44101.50C	1.6671E-05
rh103	1.44E+02	0.028%	0.641	102.9055	45103.50C	1.0798E-05
ag109	2.19E+01	0.004%	0.641	108.9048	47109.50C	1.5517E-06
nd143	2.69E+02	0.052%	0.97314	142.9098	60143.50C	2.2051E-05
nd145	2.03E+02	0.039%	0.99166	144.9125	60145.50C	1.6723E-05
sm147	7.38E+01	0.014%	0.931	146.9149	62147.50C	5.6300E-06
sm149	1.42E+00	0.000%	0.58	148.9172	62149.50C	6.6579E-08
sm150	8.04E+01	0.016%	0.885	149.9173	62150.50C	5.7136E-06
sm151	5.97E+00	0.001%	0.689	150.9199	62151.50C	3.2810E-07
eu151	2.50E-01	0.000%	0.889	150.9198	63151.55C	1.3740E-08
sm152	3.74E+01	0.007%	0.817	151.9198	62152.50C	2.4213E-06
eu153	2.70E+01	0.005%	0.91258	152.9212	63153.55C	1.9397E-06
gd155	1.69E+00	0.000%	0.3475	154.9227	64155.50C	4.5634E-08
u233	1.20E-03	0.000%	1.515	233.0395	92233.50C	9.3914E-11
u234	8.17E+01	0.016%	0.634	234.0409	92234.50C	2.6643E-06
u235	6.30E+03	1.217%	1.108	235.0439	92235.50C	3.5752E-04
u236	1.41E+03	0.272%	0.959	236.0456	92236.50C	6.8962E-05
u238	4.42E+05	85.383%	0.993	238.0508	92238.50C	2.2186E-02
np237	1.29E+02	0.025%	0.66	237.0481	93237.55C	4.3238E-06
pu238	2.93E+01	0.006%	0.843	238.0495	94238.50C	1.2491E-06
pu239	2.63E+03	0.508%	1.026	239.0521	94239.55C	1.3589E-04
pu240	6.72E+02	0.130%	1	240.0539	94240.50C	3.3700E-05
pu241	3.18E+02	0.061%	1.012	241.0567	94241.50C	1.6071E-05
pu242	7.08E+01	0.014%	1	242.0587	94242.50C	3.5211E-06
am241	1.03E+02	0.020%	0.71582	241.0567	95241.50C	3.6820E-06
am242m	4.21E-01	0.000%	1	242.0595	95242.50C	2.0938E-08
am243	1.01E+01	0.002%	1	243.0614	95243.50C	5.0023E-07
total	517670.4	100.00%			Total	6.989112E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
62377.29
Effective density = 10.03719

Vienna Actinide Only Burnup Credit fbucs Vienna Actinide Only Burnup Credit fbucs

BURNUP: PWR 20 GWd/MT PWR B&W 15x15, 3.00% , Burnup 20 GWd/MTHM
ENRICHMENT: 3.00% DECAY TIME: 5 YEARS
DECAY TIME: 5 YEARS Volume 51575.24 pwr 3.0% 20 G

ISOTOPE	GRAMS/	%	% best f	Aw	MCNP ID	Number Density
O 16	62377.29	12.050%	1	15.99492	8016.50C	4.6947E-02
u234	8.17E+01	0.016%	0.509	234.0409	92234.50C	2.1390E-06
u235	6.30E+03	1.217%	1.115	235.0439	92235.50C	3.5978E-04
u236	1.41E+03	0.272%	0.955	236.0456	92236.50C	6.8674E-05
u238	4.42E+05	85.383%	0.99	238.0508	92238.50C	2.2129E-02
pu238	2.93E+01	0.006%	0.829	238.0495	94238.50C	1.2283E-06
pu239	2.63E+03	0.508%	1.033	239.0521	94239.55C	1.3681E-04
pu240	6.72E+02	0.130%	1	240.0539	94240.50C	3.3700E-05
pu241	3.18E+02	0.061%	1.016	241.0567	94241.50C	1.6135E-05
pu242	7.08E+01	0.014%	1	242.0587	94242.50C	3.5211E-06
am241	1.03E+02	0.020%	0.583	241.0567	95241.50C	2.9988E-06
total	515992.1	99.68%			Total	6.970078E-02

oxygen mass/assembly = 464000 g UO / (1-11.8503E-2) * 11.8503E-2 fraction of O in UO2
62377.29
Effective density = 10.00465

```
=sas2h    parm='halt09,skipcellwt,skipshipdata'
SAS2H: Babcock Wilcox 15x15, 3.00wt%, 20gwd/mtu burn High Temp
27burnuplib    latticecell
'
'  mixtures of fuel-pin-unit-cell:
'    den=mass UO2/ Volume assembly = 526377.3 g/5.157524E4
uo2 1 den=10.2060 1 975 92235 3.00 92234 0.0240 92236 0.0138 92238 96.9622 end
kr-83     1 0 1-20 975 end
kr-85     1 0 1-20 975 end
sr-90     1 0 1-20 975 end
 y-89     1 0 1-20 975 end
mo-95     1 0 1-20 975 end
zr-93     1 0 1-20 975 end
zr-94     1 0 1-20 975 end
zr-95     1 0 1-20 975 end
nb-94     1 0 1-20 975 end
tc-99     1 0 1-20 975 end
rh-103    1 0 1-20 975 end
rh-105    1 0 1-20 975 end
ru-101    1 0 1-20 975 end
ru-106    1 0 1-20 975 end
pd-105    1 0 1-20 975 end
pd-108    1 0 1-20 975 end
ag-109    1 0 1-20 975 end
sb-124    1 0 1-20 975 end
xe-131    1 0 1-20 975 end
xe-132    1 0 1-20 975 end
xe-135    1 0 1-20 975 end
xe-136    1 0 1-20 975 end
cs-134    1 0 1-20 975 end
cs-135    1 0 1-20 975 end
cs-137    1 0 1-20 975 end
ba-136    1 0 1-20 975 end
la-139    1 0 1-20 975 end
pr-141    1 0 1-20 975 end
pr-143    1 0 1-20 975 end
ce-144    1 0 1-20 975 end
nd-143    1 0 1-20 975 end
nd-145    1 0 1-20 975 end
pm-147    1 0 1-20 975 end
pm-148    1 0 1-20 975 end
nd-147    1 0 1-20 975 end
sm-147    1 0 1-20 975 end
sm-149    1 0 1-20 975 end
sm-150    1 0 1-20 975 end
sm-151    1 0 1-20 975 end
sm-152    1 0 1-20 975 end
gd-155    1 0 1-20 975 end
eu-153    1 0 1-20 975 end
eu-154    1 0 1-20 975 end
eu-155    1 0 1-20 975 end
zircalloy 2   1.0  650 end
h2o       3 den=0.6272 1 607.6 end
arbm-bormod 0.6272 1 1 0 0 5000 100 3 552.6e-6 607.6 end
'
' 1050 ppm boron
' - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
end comp
'
' - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
'
'  fuel-pin-cell geometry:
'
squarepitch  1.44272  0.936244 1 3 1.0922 2 0.95758 0 end
'
' - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
'
'
'  assembly and cycle parameters:
'
```

```
npin/assm=208 fuelngth=360.172 ncycles=9 nlib/cyc=1
printlevel=5 inplevel=2 numztotal=4  end
3 0.63246 2 0.67310 3 0.814 500 2.961
power=7.25 burn=160 down=0
power=7.25 burn=160 down=0
power=7.25 burn=160 down=0
power=7.25 burn=160 down=0
power=7.25 burn=160 down=0
power=7.25 burn=160 down=0
power=7.25 burn=160 down=0
power=7.25 burn=160 down=0
power=4.976-5 burn=1. down=0. bfrac=0. h2ofrac=1.594 tcmkcyc=373 end
   end
end
```

```
=origens
0$$  a8 26 a11 71 e
1$$ 1  1t
 b&w 15x15, 3.0%/20 Decay
3$$ 21 0 1 e
'   3$$ 21 0 1  a33  -88
2t
35$$ 0  t
'  54$$ a8 1 e
'   56$$ 0 7 a5 1 a13 -1 a15 3 0 4 e   5t
56$$ 0 7 a13 -1 a15 3 0 4 e   5t
Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay
per B&W assembly, 0.409 mtHm for grams
60**  0 1 90 365.25 730.5 1826.25  3652.5
'  61** f1-20
'  65$$ a4 1 2z 1 2z 1 5z 1 2z 1
'   a25 1 2z 1 2z 1 5z 1 2z 1
'   a46 1 2z 1 2z 1 5z 1 2z 1 e
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
6t
'   56$$ 0 -6 a10 1  e  t
56$$ 0 10 a10 7 a14 5 a17 4 e  57** 10  e  5t
60**  15 20 30 50 100 150 200 250 300 400
'  61** f1-20
'  65$$ a4 1 2z 1 2z 1 5z 1 2z 1
'   a25 1 2z 1 2z 1 5z 1 2z 1
'   a46 1 2z 1 2z 1 5z 1 2z 1 e
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
6t
56$$ 0 10 a10 10 a14 5 a17 4 e  57** 400  e  5t
60**  500 1+3 2+3 4+3 6+3 8+3 1+4 1.2+4 1.4+4 1.5+4
'    61** f1-20
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
6t
56$$ 0 10 a10 10 a14 5 a17 4 e  57** 1.5+4  e  5t
60**  1.6+4 1.7+4 1.8+4 1.9+4 2.0+4 2.1+4 2.2+4 2.3+4 2.4+4 2.5+4
'  61** f1-20
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
6t
56$$ 0 10 a10 10 a14 5 a17 4 e  57** 2.5+4  e  5t
60**  3.5+4 4.5+4 5+4 5.5+4 6+4 6.5+4 7+4 1+5 2+5 2.5+5
'    61** f1-20
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
6t
56$$ 0 3 a10 10 a14 5 a17 4 e  57** 2.5+5  e  5t
60**  3+5 5+5 999999
'  61** f1-20
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
6t
'   56$$ 0 -10 a10 1 e  t
56$$ f0  t
end
```

INFORMATION ONLY

Decay Only *** Summary of Activity output from S30I0ucfo1.out dated 3/12/96

Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay actinides page 4

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtihm for grams

	charge	discharge	.0 d	1.0 d	90.0 d	365.3 d	730.5 d	1826.3 d	3652.5 d
he 4	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tl206	1.20E-15	1.20E-15	1.20E-15	1.21E-15	1.39E-15	1.85E-15	2.70E-15	7.71E-15	2.82E-14
tl207	5.12E-07	5.12E-07	5.12E-07	5.13E-07	6.08E-07	9.53E-07	1.34E-06	2.50E-06	4.37E-06
tl208	3.10E-04	3.10E-04	3.10E-04	3.17E-04	3.91E-04	6.77E-04	1.10E-03	2.28E-03	3.34E-03
tl209	8.55E-10	8.55E-10	8.55E-10	8.68E-10	1.79E-10	1.66E-10	1.84E-10	2.44E-10	3.60E-10
pb206	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb207	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb209	4.13E-08	4.13E-08	4.13E-08	3.94E-08	8.52E-09	7.88E-09	8.77E-09	1.16E-08	1.71E-08
pb210	9.27E-10	9.27E-10	9.27E-10	9.29E-10	1.09E-09	1.40E-09	2.05E-09	5.84E-09	2.13E-08
pb211	5.13E-07	5.13E-07	5.13E-07	5.15E-07	6.10E-07	9.56E-07	1.35E-06	2.51E-06	4.38E-06
pb212	8.62E-04	8.62E-04	8.62E-04	8.62E-04	1.09E-03	1.88E-03	3.07E-03	6.33E-03	9.29E-03
pb214	1.20E-08	1.20E-08	1.20E-08	1.20E-08	1.34E-08	1.85E-08	2.71E-08	6.48E-08	1.68E-07
bi208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi209	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210	9.11E-10	9.11E-10	9.11E-10	9.13E-10	1.09E-09	1.40E-09	2.05E-09	5.84E-09	2.13E-08
bi211	5.13E-07	5.13E-07	5.13E-07	5.15E-07	6.10E-07	9.56E-07	1.35E-06	2.51E-06	4.38E-06
bi212	8.62E-04	8.62E-04	8.62E-04	8.81E-04	1.09E-03	1.88E-03	3.07E-03	6.33E-03	9.29E-03
bi213	4.07E-08	4.07E-08	4.07E-08	4.13E-08	8.52E-09	7.88E-09	8.77E-09	1.16E-08	1.71E-08
bi214	1.20E-08	1.20E-08	1.20E-08	1.20E-08	1.34E-08	1.85E-08	2.71E-08	6.48E-08	1.68E-07
po210	5.83E-10	5.83E-10	5.83E-10	5.85E-10	7.29E-10	1.11E-09	1.67E-09	4.93E-09	2.13E-08
po211m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
po211	1.41E-09	1.41E-09	1.41E-09	1.42E-09	1.68E-09	2.63E-09	3.71E-09	6.89E-09	1.20E-08
po212	5.52E-04	5.52E-04	5.52E-04	5.64E-04	6.97E-04	1.21E-03	1.96E-03	4.05E-03	5.95E-03
po213	3.99E-08	3.99E-08	3.99E-08	4.05E-08	8.34E-09	7.72E-09	8.58E-09	1.14E-08	1.68E-08
po214	2.83E-08	2.83E-08	2.83E-08	2.78E-08	1.42E-08	1.85E-08	2.71E-08	6.48E-08	1.68E-07
po215	5.14E-07	5.14E-07	5.14E-07	5.15E-07	6.10E-07	9.56E-07	1.35E-06	2.51E-06	4.38E-06
po216	8.62E-04	8.62E-04	8.62E-04	8.62E-04	1.09E-03	1.88E-03	3.07E-03	6.33E-03	9.29E-03
po218	1.20E-08	1.20E-08	1.20E-08	1.20E-08	1.34E-08	1.85E-08	2.71E-08	6.48E-08	1.68E-07
at217	4.13E-08	4.13E-08	4.13E-08	4.13E-08	8.52E-09	7.88E-09	8.77E-09	1.16E-08	1.71E-08
rn218	1.62E-08	1.62E-08	1.62E-08	1.57E-08	8.07E-10	8.38E-14	4.33E-19	.00E+00	.00E+00
rn219	5.14E-07	5.14E-07	5.14E-07	5.15E-07	6.10E-07	9.56E-07	1.35E-06	2.51E-06	4.38E-06
rn220	8.62E-04	8.62E-04	8.62E-04	8.62E-04	1.09E-03	1.88E-03	3.07E-03	6.33E-03	9.29E-03
rn222	1.19E-08	1.19E-08	1.19E-08	1.19E-08	1.34E-08	1.85E-08	2.71E-08	6.48E-08	1.68E-07
fr221	4.13E-08	4.13E-08	4.13E-08	4.13E-08	8.52E-09	7.88E-09	8.77E-09	1.16E-08	1.71E-08
fr223	7.71E-09	7.71E-09	7.71E-09	7.73E-09	9.09E-09	1.32E-08	1.86E-08	3.45E-08	6.01E-08
ra222	1.62E-08	1.62E-08	1.62E-08	1.57E-08	8.07E-10	8.38E-14	4.33E-19	.00E+00	.00E+00
ra223	5.14E-07	5.14E-07	5.14E-07	5.15E-07	6.10E-07	9.56E-07	1.35E-06	2.51E-06	4.38E-06
ra224	8.62E-04	8.62E-04	8.62E-04	8.62E-04	1.09E-03	1.88E-03	3.07E-03	6.33E-03	9.29E-03
ra225	3.98E-08	3.98E-08	3.98E-08	3.81E-08	7.68E-09	7.88E-09	8.77E-09	1.16E-08	1.71E-08
ra226	1.20E-08	1.20E-08	1.20E-08	1.20E-08	1.34E-08	1.85E-08	2.71E-08	6.48E-08	1.68E-07
ra228	1.30E-12	1.30E-12	1.30E-12	1.30E-12	1.54E-12	2.44E-12	4.00E-12	1.05E-11	2.58E-11
ac225	4.13E-08	4.13E-08	4.13E-08	4.13E-08	8.52E-09	7.88E-09	8.77E-09	1.16E-08	1.71E-08
ac227	5.59E-07	5.59E-07	5.59E-07	5.60E-07	6.56E-07	9.54E-07	1.35E-06	2.50E-06	4.37E-06
ac228	1.29E-12	1.29E-12	1.29E-12	1.30E-12	1.54E-12	2.44E-12	4.00E-12	1.05E-11	2.58E-11
th226	1.62E-08	1.62E-08	1.62E-08	1.57E-08	8.07E-10	8.38E-14	4.33E-19	.00E+00	.00E+00
th227	5.23E-07	5.23E-07	5.23E-07	5.24E-07	6.19E-07	9.42E-07	1.33E-06	2.47E-06	4.32E-06
th228	8.61E-04	8.61E-04	8.61E-04	8.63E-04	1.08E-03	1.88E-03	3.09E-03	6.33E-03	9.28E-03
th229	7.04E-09	7.04E-09	7.04E-09	7.04E-09	7.24E-09	7.88E-09	8.77E-09	1.16E-08	1.71E-08
th230	1.25E-05	1.25E-05	1.25E-05	1.25E-05	1.40E-05	1.75E-05	2.21E-05	3.61E-05	5.96E-05
th231	1.90E-01	1.90E-01	1.90E-01	1.06E-01	1.36E-02	1.36E-02	1.36E-02	1.36E-02	1.36E-02

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay actinides page 5

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

	charge	discharge	.0 d	1.0 d	90.0 d	365.3 d	730.5 d	1826.3 d	3652.5 d
th232	9.24E-12	9.24E-12	9.24E-12	9.24E-12	1.04E-11	1.38E-11	1.83E-11	3.18E-11	5.44E-11
th233	2.00E-08	2.00E-08	2.00E-08	7.27E-28	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th234	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
pa231	1.30E-05	1.30E-05	1.30E-05	1.30E-05	1.31E-05	1.33E-05	1.36E-05	1.45E-05	1.59E-05
pa232	6.01E-02	6.01E-02	6.01E-02	3.54E-02	1.26E-22	.00E+00	.00E+00	.00E+00	.00E+00
pa233	8.71E-02	8.71E-02	8.71E-02	8.72E-02	9.01E-02	9.05E-02	9.05E-02	9.08E-02	9.15E-02
pa234m	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
pa234	2.45E-04	2.45E-04	2.45E-04	1.98E-04	1.93E-04	1.94E-04	1.95E-04	1.93E-04	1.93E-04
pa235	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u230	1.62E-08	1.62E-08	1.62E-08	1.57E-08	8.07E-10	8.37E-14	4.33E-19	.00E+00	.00E+00
u231	1.32E-06	1.32E-06	1.32E-06	1.12E-06	4.71E-13	.00E+00	.00E+00	.00E+00	.00E+00
u232	3.23E-03	3.23E-03	3.23E-03	3.24E-03	3.71E-03	5.01E-03	6.38E-03	8.85E-03	1.02E-02
u233	9.38E-06	9.38E-06	9.38E-06	9.39E-06	9.48E-06	9.82E-06	1.03E-05	1.15E-05	1.35E-05
u234	5.01E-01	5.01E-01	5.01E-01	5.01E-01	5.01E-01	5.02E-01	5.04E-01	5.08E-01	5.15E-01
u235	1.36E-02	1.36E-02	1.36E-02	1.36E-02	1.36E-02	1.36E-02	1.36E-02	1.36E-02	1.36E-02
u236	9.14E-02	9.14E-02	9.14E-02	9.14E-02	9.14E-02	9.14E-02	9.14E-02	9.15E-02	9.15E-02
u237	1.34E+05	1.34E+05	1.34E+05	1.21E+05	1.40E+01	9.54E-01	9.03E-01	7.85E-01	6.18E-01
u238	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
u239	2.99E+01	2.99E+01	2.99E+01	1.01E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u240	1.89E-17	1.89E-17	1.89E-17	1.91E-17	3.27E-17	7.43E-17	1.30E-16	2.95E-16	5.72E-16
u241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np235	4.48E-03	4.48E-03	4.48E-03	4.47E-03	3.83E-03	2.34E-03	1.25E-03	1.83E-04	7.52E-06
np236m	8.00E-01	8.00E-01	8.00E-01	3.82E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236	4.88E-06	4.88E-06	4.88E-06	4.88E-06	4.88E-06	4.88E-06	4.88E-06	4.88E-06	4.88E-06
np237	8.93E-02	8.93E-02	8.93E-02	8.94E-02	9.04E-02	9.05E-02	9.05E-02	9.08E-02	9.15E-02
np238	3.13E+04	3.13E+04	3.13E+04	2.26E+04	2.03E-02	2.03E-02	2.03E-02	1.95E-02	1.94E-02
np239	3.27E+06	3.27E+06	3.27E+06	2.43E+06	2.01E+00	2.01E+00	2.01E+00	2.01E+00	2.01E+00
np240m	1.91E-17	1.91E-17	1.91E-17	1.91E-17	3.27E-17	7.43E-17	1.30E-16	2.95E-16	5.72E-16
np240	2.44E-02	2.44E-02	2.44E-02	2.45E-09	3.99E-20	8.92E-20	1.56E-19	3.55E-19	6.86E-19
np241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu236	2.06E-01	2.06E-01	2.06E-01	2.06E-01	1.95E-01	1.62E-01	1.27E-01	6.21E-02	1.88E-02
pu237	1.34E-01	1.34E-01	1.34E-01	1.32E-01	3.36E-02	4.92E-04	1.81E-06	9.03E-14	6.11E-26
pu238	4.75E+02	4.75E+02	4.75E+02	4.78E+02	4.90E+02	5.08E+02	5.11E+02	5.01E+02	4.82E+02
pu239	1.62E+02	1.62E+02	1.62E+02	1.63E+02	1.63E+02	1.63E+02	1.63E+02	1.63E+02	1.63E+02
pu240	1.53E+02	1.53E+02	1.53E+02	1.53E+02	1.53E+02	1.53E+02	1.53E+02	1.53E+02	1.53E+02
pu241	4.19E+04	4.19E+04	4.19E+04	4.19E+04	4.14E+04	3.99E+04	3.80E+04	3.25E+04	2.58E+04
pu242	2.80E-01	2.80E-01	2.80E-01	2.80E-01	2.80E-01	2.80E-01	2.80E-01	2.80E-01	2.80E-01
pu243	9.15E+02	9.15E+02	9.15E+02	3.19E+01	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09
pu244	1.91E-17	1.91E-17	1.91E-17	1.92E-17	3.27E-17	7.44E-17	1.30E-16	2.96E-16	5.73E-16
pu245	1.90E-13	1.90E-13	1.90E-13	3.88E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu246	1.51E-16	1.51E-16	1.51E-16	1.46E-16	6.15E-17	6.12E-17	6.12E-17	6.12E-17	6.12E-17
am239	8.26E-05	8.26E-05	8.26E-05	2.04E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am240	2.45E-02	2.45E-02	2.45E-02	1.76E-02	4.08E-15	.00E+00	.00E+00	.00E+00	.00E+00
am241	5.87E+01	5.87E+01	5.87E+01	5.89E+01	7.51E+01	1.24E+02	1.86E+02	3.55E+02	5.85E+02
am242m	4.53E+00	4.53E+00	4.53E+00	4.53E+00	4.52E+00	4.50E+00	4.48E+00	4.42E+00	4.31E+00
am242	5.66E+03	5.66E+03	5.66E+03	2.00E+03	4.50E+00	4.48E+00	4.44E+00	4.40E+00	4.29E+00
am243	2.01E+00	2.01E+00	2.01E+00	2.01E+00	2.01E+00	2.01E+00	2.01E+00	2.01E+00	2.01E+00
am244m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am244	9.14E+02	9.14E+02	9.14E+02	1.76E+02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am245	3.72E-10	3.72E-10	3.72E-10	3.71E-10	3.06E-10	1.68E-10	7.63E-11	7.11E-12	1.36E-13
am246	1.51E-16	1.51E-16	1.51E-16	1.46E-16	6.15E-17	6.12E-17	6.12E-17	6.12E-17	6.12E-17
cm241	1.00E-05	1.00E-05	1.00E-05	9.81E-06	1.50E-06	4.44E-09	1.98E-12	1.74E-22	.00E+00

1 Part B B&W 15x15, 3.00w%, 20gwd/mtu decay actinides page 6

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

	charge	discharge	.0 d	1.0 d	90.0 d	365.3 d	730.5 d	1826.3 d	3652.5 d

cm242	8.61E+03	8.61E+03	8.61E+03	8.58E+03	5.89E+03	1.83E+03	3.89E+02	7.29E+00	3.55E+00
cm243	3.11E+00	3.11E+00	3.11E+00	3.11E+00	3.09E+00	3.04E+00	2.96E+00	2.78E+00	2.44E+00
cm244	1.23E+02	1.23E+02	1.23E+02	1.23E+02	1.22E+02	1.18E+02	1.14E+02	1.01E+02	8.38E+01
cm245	7.87E-03	7.87E-03	7.87E-03	7.87E-03	7.87E-03	7.87E-03	7.87E-03	7.87E-03	7.87E-03
cm246	9.21E-04	9.21E-04	9.21E-04	9.21E-04	9.21E-04	9.21E-04	9.21E-04	9.21E-04	9.20E-04
cm247	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09
cm248	6.96E-09	6.96E-09	6.96E-09	6.96E-09	6.96E-09	6.96E-09	6.96E-09	6.96E-09	6.96E-09
cm249	1.00E-09	1.00E-09	1.00E-09	1.81E-11	5.68E-13	1.27E-17	8.51E-24	.00E+00	.00E+00
cm250	2.45E-16	2.45E-16	2.45E-16	2.45E-16	2.45E-16	2.45E-16	2.45E-16	2.45E-16	2.45E-16
cm251	2.24E-20	2.24E-20	2.24E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk249	2.56E-05	2.56E-05	2.56E-05	2.56E-05	2.11E-05	1.16E-05	5.26E-06	4.90E-07	9.39E-09
bk250	1.25E-07	1.25E-07	1.25E-07	7.14E-10	5.26E-12	2.65E-12	1.06E-12	6.73E-14	7.16E-16
bk251	4.36E-14	4.36E-14	4.36E-14	4.28E-14	8.79E-15	6.60E-17	1.00E-19	3.49E-28	.00E+00
cf249	1.18E-08	1.18E-08	1.18E-08	1.20E-08	2.32E-08	4.68E-08	6.25E-08	7.40E-08	7.45E-08
cf250	1.90E-07	1.90E-07	1.90E-07	1.90E-07	1.88E-07	1.80E-07	1.71E-07	1.46E-07	1.12E-07
cf251	1.35E-09	1.35E-09	1.35E-09	1.35E-09	1.35E-09	1.35E-09	1.35E-09	1.35E-09	1.34E-09
cf252	1.35E-07	1.35E-07	1.35E-07	1.35E-07	1.27E-07	1.04E-07	8.01E-08	3.65E-08	9.84E-09
cf253	6.06E-09	6.06E-09	6.06E-09	5.83E-09	1.83E-10	4.07E-15	2.74E-21	.00E+00	.00E+00
cf254	7.31E-13	7.31E-13	7.31E-13	7.23E-13	2.61E-13	1.11E-14	1.70E-16	5.99E-22	4.79E-31
cf255	1.57E-18	1.57E-18	1.57E-18	2.39E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es253	4.85E-09	4.85E-09	4.85E-09	4.85E-09	9.33E-10	1.66E-13	8.05E-19	.00E+00	.00E+00
es254m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254	6.63E-12	6.63E-12	6.63E-12	6.61E-12	5.29E-12	2.65E-12	1.06E-12	6.72E-14	6.81E-16
es255	4.35E-14	4.35E-14	4.35E-14	4.27E-14	8.79E-15	6.59E-17	1.00E-19	3.48E-28	.00E+00
s250	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	3.49E+06	3.49E+06	3.49E+06	2.63E+06	4.83E+04	4.28E+04	3.95E+04	3.42E+04	2.73E+04

INFORMATION ONLY

Part B B&W 15x15, 3.00wt%, 20gwd/mtu dcay fission products page 24

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nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtms for grams

	charge	discharge	.0 d	1.0 d	90.0 d	365.3 d	730.5 d	1826.3 d	3652.5 d
h 3	1.31E+02	1.31E+02	1.31E+02	1.31E+02	1.29E+02	1.24E+02	1.17E+02	9.91E+01	7.48E+01
li 6	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
li 7	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
be 9	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
be 10	8.26E-07	8.26E-07	8.26E-07	8.26E-07	8.26E-07	8.26E-07	8.26E-07	8.26E-07	8.26E-07
c 14	3.33E-05	3.33E-05	3.33E-05	3.33E-05	3.33E-05	3.33E-05	3.33E-05	3.33E-05	3.33E-05
ni 66	3.70E-04	3.70E-04	3.70E-04	2.73E-04	4.58E-16	.00E+00	.00E+00	.00E+00	.00E+00
cu 66	3.70E-04	3.70E-04	3.70E-04	2.73E-04	4.59E-16	.00E+00	.00E+00	.00E+00	.00E+00
zn 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 67	4.59E-05	4.59E-05	4.59E-05	3.51E-05	1.40E-15	.00E+00	.00E+00	.00E+00	.00E+00
zn 67	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 68	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 69	5.92E-05	5.92E-05	5.92E-05	1.77E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 69m	5.51E-05	5.51E-05	5.51E-05	1.65E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 69	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 70	6.03E-11	6.03E-11	6.03E-11	1.83E-31	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 71	7.31E-08	7.31E-08	7.31E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 71m	6.82E-04	6.82E-04	6.82E-04	1.02E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 71	1.21E-07	1.21E-07	1.21E-07	1.14E-07	5.17E-10	2.93E-17	7.11E-27	.00E+00	.00E+00
ge 71m	4.43E-13	4.43E-13	4.43E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 72	1.03E-07	1.03E-07	1.03E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 72	5.96E-06	5.96E-06	5.96E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 72	1.70E-05	1.70E-05	1.70E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 72	2.24E+00	2.24E+00	2.24E+00	1.56E+00	2.32E-14	.00E+00	.00E+00	.00E+00	.00E+00
ga 72	2.79E+00	2.79E+00	2.79E+00	2.11E+00	3.34E-14	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

ge 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 73	5.65E-08	5.65E-08	5.65E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 73	6.07E-06	6.07E-06	6.07E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 73	3.54E-05	3.54E-05	3.54E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 73	6.17E-05	6.17E-05	6.17E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 73	2.98E-01	2.98E-01	2.98E-01	9.74E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73m	2.94E-01	2.94E-01	2.94E-01	9.61E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 74	1.12E-08	1.12E-08	1.12E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 74	3.98E-06	3.98E-06	3.98E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 74	4.44E-05	4.44E-05	4.44E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 74	1.52E-04	1.52E-04	1.52E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 74	4.78E-05	4.78E-05	4.78E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 75	2.28E-09	2.28E-09	2.28E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 75	1.77E-06	1.77E-06	1.77E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 75	5.62E-05	5.62E-05	5.62E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 75	3.52E-04	3.52E-04	3.52E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 75	4.31E-04	4.31E-04	4.31E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75	8.11E-04	8.11E-04	8.11E-04	4.78E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75m	2.34E-05	2.34E-05	2.34E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 76	7.07E-07	7.07E-07	7.07E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 76	4.54E-05	4.54E-05	4.54E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 25

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nuclide radioactivity, curies
basis per B&W assembly, 0.409 mtms for grams

	charge	discharge	.0 d	1.0 d	90.0 d	365.3 d	730.5 d	1826.3 d	3652.5 d
zn 76	7.74E-04	7.74E-04	7.74E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 76	1.16E-03	1.16E-03	1.16E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 76	1.38E+00	1.38E+00	1.38E+00	7.32E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 77	1.67E-07	1.67E-07	1.67E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 77	2.66E-05	2.66E-05	2.66E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 77	9.49E-04	9.49E-04	9.49E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 77	2.42E-03	2.42E-03	2.42E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 77	3.13E+01	3.13E+01	3.13E+01	7.19E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 77m	2.48E-03	2.48E-03	2.48E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 77	2.95E+02	2.95E+02	2.95E+02	2.00E+02	5.62E-15	.00E+00	.00E+00	.00E+00	.00E+00
se 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 77m	9.56E-01	9.56E-01	9.56E-01	6.40E-01	1.80E-17	.00E+00	.00E+00	.00E+00	.00E+00
ni 78	3.48E-08	3.48E-08	3.48E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 78	1.08E-05	1.08E-05	1.08E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 78	1.21E-03	1.21E-03	1.21E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 78	5.41E-03	5.41E-03	5.41E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 78	2.50E-02	2.50E-02	2.50E-02	2.97E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 78	2.39E-01	2.39E-01	2.39E-01	7.87E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 79	2.69E-06	2.69E-06	2.69E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 79	5.81E-04	5.81E-04	5.81E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 79	5.40E-03	5.40E-03	5.40E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 79	1.59E-02	1.59E-02	1.59E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 79	1.72E-02	1.72E-02	1.72E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 79	1.92E-01	1.92E-01	1.92E-01	1.92E-01	1.92E-01	1.92E-01	1.92E-01	1.92E-01	1.92E-01
se 79m	1.71E-02	1.71E-02	1.71E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 79m	6.07E-09	6.07E-09	6.07E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 79	4.70E-08	4.70E-08	4.70E-08	2.92E-08	1.28E-26	.00E+00	.00E+00	.00E+00	.00E+00

cu 80	3.13E-07	3.13E-07	3.13E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 80	2.20E-04	2.20E-04	2.20E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 80	4.35E-03	4.35E-03	4.35E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 80	3.90E-02	3.90E-02	3.90E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 80	4.54E-02	4.54E-02	4.54E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 80	8.13E-04	8.13E-04	8.13E-04	1.85E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 80m	7.59E-04	7.59E-04	7.59E-04	1.72E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 81	3.17E-08	3.17E-08	3.17E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 81	5.00E-05	5.00E-05	5.00E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 81	2.75E-03	2.75E-03	2.75E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 81	4.12E-02	4.12E-02	4.12E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 81	6.56E-02	6.56E-02	6.56E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81	6.91E-02	6.91E-02	6.91E-02	1.97E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81m	4.97E-03	4.97E-03	4.97E-03	1.34E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 81	1.48E-08	1.48E-08	1.48E-08	1.48E-08	1.48E-08	1.48E-08	1.48E-08	1.48E-08	1.48E-08
kr 81m	7.32E-09	7.32E-09	7.32E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 82	1.12E-05	1.12E-05	1.12E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 82	1.74E-03	1.74E-03	1.74E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BBW 15x15, 3.00wt%, 20gwd/mtu decay fission products page 26

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nuclide radioactivity, curies
basis =per BBW assembly, 0.409 mtHm for grams

	charge	discharge	.0 d	1.0 d	30.0 d	365.3 d	730.5 d	1826.3 d	3652.5 d
ge 82	3.95E-02	3.95E-02	3.95E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 82	6.45E-02	6.45E-02	6.45E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 82m	2.50E-02	2.50E-02	2.50E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 82	2.69E+02	2.69E+02	2.69E+02	1.68E+02	1.03E-16	.00E+00	.00E+00	.00E+00	.00E+00
br 82m	2.42E-03	2.42E-03	2.42E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 83	5.72E-07	5.72E-07	5.72E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 83	2.07E-04	2.07E-04	2.07E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 83	1.78E-02	1.78E-02	1.78E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 83	1.03E-01	1.03E-01	1.03E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83	7.80E-02	7.80E-02	7.80E-02	2.85E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83m	8.25E-02	8.25E-02	8.25E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 83	2.58E+01	2.58E+01	2.58E+01	2.52E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 83m	9.83E+01	9.83E+01	9.83E+01	1.17E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 84	1.68E-03	1.68E-03	1.68E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 84	1.14E-02	1.14E-02	1.14E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 84	7.56E-02	7.56E-02	7.56E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 84	3.00E-01	3.00E-01	3.00E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84	3.08E-01	3.08E-01	3.08E-01	7.98E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84m	8.25E-03	8.25E-03	8.25E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 85	3.30E-06	3.30E-06	3.30E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 85	2.00E-03	2.00E-03	2.00E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 85	4.37E-02	4.37E-02	4.37E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85	1.42E-01	1.42E-01	1.42E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85m	1.24E-01	1.24E-01	1.24E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 85	3.43E-01	3.43E-01	3.43E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 85	2.61E+03	2.61E+03	2.61E+03	2.61E+03	2.57E+03	2.45E+03	2.29E+03	1.89E+03	1.37E+03
kr 85m	1.24E+03	1.24E+03	1.24E+03	3.02E+01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 86	4.26E-04	4.26E-04	4.26E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 86	2.45E-02	2.45E-02	2.45E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

se 86	3.39E-01	3.39E-01	3.39E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86	4.18E-01	4.18E-01	4.18E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86m	7.95E-02	7.95E-02	7.95E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 86	2.10E+02	2.10E+02	2.10E+02	2.02E+02	7.37E+00	2.63E-04	3.31E-10	6.59E-28	.00E+00
rb 86m	1.21E-04	1.21E-04	1.21E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 87	3.56E-03	3.56E-03	3.56E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 87	1.43E-02	1.43E-02	1.43E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 87	1.99E-01	1.99E-01	1.99E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 87	5.45E-01	5.45E-01	5.45E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 87	9.03E-01	9.03E-01	9.03E-01	1.90E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 87	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06
sr 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 87m	1.90E-03	1.90E-03	1.90E-03	5.13E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 88	6.29E-06	6.29E-06	6.29E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 88	6.31E-03	6.31E-03	6.31E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 88	1.07E-01	1.07E-01	1.07E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BBU 15x15, 3.00wt%, 20gwd/mtu decay fission products page 27

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nuclide radioactivity, curies
basis =per BBU assembly, 0.409 mtm for grams

	charge	discharge	.0 d	1.0 d	90.0 d	365.3 d	730.5 d	1826.3 d	3652.5 d
br 88	5.28E-01	5.28E-01	5.28E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 88	3.99E+02	3.99E+02	3.99E+02	1.14E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 88	4.46E+02	4.46E+02	4.46E+02	1.27E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 89	1.15E-04	1.15E-04	1.15E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 89	3.76E-02	3.76E-02	3.76E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 89	3.67E-01	3.67E-01	3.67E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 89	1.19E+00	1.19E+00	1.19E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 89	1.25E+00	1.25E+00	1.25E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 89	1.90E+05	1.90E+05	1.90E+05	1.87E+05	5.52E+04	1.27E+03	8.48E+00	2.53E-06	3.38E-17
y 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89m	1.76E+01	1.76E+01	1.76E+01	1.74E+01	5.14E+00	1.18E-01	7.88E-04	2.36E-10	3.15E-21
as 90	1.11E-06	1.11E-06	1.11E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 90	8.32E-03	8.32E-03	8.32E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 90	1.99E-01	1.99E-01	1.99E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 90	1.28E+00	1.28E+00	1.28E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90	1.18E+00	1.18E+00	1.18E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90m	3.74E-01	3.74E-01	3.74E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 90	2.29E+04	2.29E+04	2.29E+04	2.29E+04	2.28E+04	2.24E+04	2.18E+04	2.03E+04	1.79E+04
y 90	2.33E+04	2.33E+04	2.33E+04	2.32E+04	2.28E+04	2.24E+04	2.19E+04	2.03E+04	1.79E+04
y 90m	2.17E-03	2.17E-03	2.17E-03	1.18E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 91	8.43E-04	8.43E-04	8.43E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 91	6.56E-02	6.56E-02	6.56E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 91	8.77E-01	8.77E-01	8.77E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	1.56E+00	1.56E+00	1.56E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 91	4.26E+04	4.26E+04	4.26E+04	7.41E+03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91	2.47E+05	2.47E+05	2.47E+05	2.44E+05	8.52E+04	3.27E+03	4.31E+01	9.93E-05	3.99E-14
y 91m	2.70E+04	2.70E+04	2.70E+04	4.71E+03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	1.54E-09	1.54E-09	1.54E-09	1.54E-09	1.54E-09	1.54E-09	1.54E-09	1.53E-09	1.53E-09
se 92	6.96E-05	6.96E-05	6.96E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 92	1.12E-02	1.12E-02	1.12E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 92	4.67E-01	4.67E-01	4.67E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 92	1.38E+00	1.38E+00	1.38E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 92	5.60E+02	5.60E+02	5.60E+02	1.21E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

y 92	8.23E+03	8.23E+03	8.23E+03	8.75E+01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 92	3.65E-12	3.65E-12	3.65E-12	3.65E-12	3.65E-12	3.65E-12	3.65E-12	3.65E-12	3.65E-12
se 93	5.26E-07	5.26E-07	5.26E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 93	3.09E-03	3.09E-03	3.09E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 93	1.60E-01	1.60E-01	1.60E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 93	1.14E+00	1.14E+00	1.14E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 93	2.00E+00	2.00E+00	2.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 93	3.85E+04	3.85E+04	3.85E+04	7.42E+03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 93	3.49E-01	3.49E-01	3.49E-01	3.49E-01	3.49E-01	3.49E-01	3.49E-01	3.49E-01	3.49E-01
rb 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 93m	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.97E-02	3.99E-02	5.22E-02	8.87E-02	1.39E-01
br 94	1.61E-04	1.61E-04	1.61E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 94	7.33E-02	7.33E-02	7.33E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 94	5.88E-01	5.88E-01	5.88E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

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Part B BW 15x15, 3.00wt%, 20gwd/mtu decay fission products page 28

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nuclide radioactivity, curies
basis =per BW assembly, 0.409 atms for grams

	charge	discharge	.0 d	1.0 d	90.0 d	365.3 d	730.5 d	1826.3 d	3652.5 d
sr 94	1.99E+00	1.99E+00	1.99E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 94	2.15E+00	2.15E+00	2.15E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 94	2.34E-05	2.34E-05	2.34E-05	2.34E-05	2.34E-05	2.34E-05	2.34E-05	2.34E-05	2.34E-05
rb 94m	7.24E-07	7.24E-07	7.24E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 95	1.82E-06	1.82E-06	1.82E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 95	6.91E-03	6.91E-03	6.91E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 95	2.85E-01	2.85E-01	2.85E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 95	1.78E+00	1.78E+00	1.78E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 95	2.23E+00	2.23E+00	2.23E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 95	3.30E+05	3.30E+05	3.30E+05	3.27E+05	1.25E+05	6.33E+03	1.21E+02	8.54E-04	2.21E-12
nb 95	3.36E+05	3.35E+05	3.35E+05	3.35E+05	2.09E+05	1.37E+04	2.78E+02	1.88E-03	4.88E-12
nb 95m	3.83E+03	3.83E+03	3.83E+03	3.80E+03	1.47E+03	7.45E+01	1.43E+00	1.00E-05	2.59E-14
mo 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 96	4.06E-07	4.06E-07	4.06E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 96	1.20E-03	1.20E-03	1.20E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 96	7.10E-02	7.10E-02	7.10E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 96	1.30E+00	1.30E+00	1.30E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 96	2.15E+00	2.15E+00	2.15E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 96	1.77E+02	1.77E+02	1.77E+02	8.70E+01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 97	1.62E-05	1.62E-05	1.62E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 97	1.95E-02	1.95E-02	1.95E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 97	6.59E-01	6.59E-01	6.59E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 97	1.76E+00	1.76E+00	1.76E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 97	1.19E+05	1.19E+05	1.19E+05	4.44E+04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 97	1.28E+05	1.28E+05	1.28E+05	4.46E+04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 97m	1.13E+05	1.13E+05	1.13E+05	4.21E+04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 98	5.78E-06	5.78E-06	5.78E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 98	1.96E-03	1.96E-03	1.96E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 98	2.70E-01	2.70E-01	2.70E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 98	1.31E+00	1.31E+00	1.31E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 98	2.32E+00	2.32E+00	2.32E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 98	2.33E+00	2.33E+00	2.33E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 98m	1.82E-02	1.82E-02	1.82E-02	6.44E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc 98	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.19E-06
rb 99	5.79E-05	5.79E-05	5.79E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

sr 99	1.05E-01	1.05E-01	1.05E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 99	8.23E-01	8.23E-01	8.23E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 99	2.27E+00	2.27E+00	2.27E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 99	1.47E+00	1.47E+00	1.47E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 99m	1.01E+00	1.01E+00	1.01E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 99	2.84E+05	2.84E+05	2.84E+05	2.21E+05	3.92E-05	.00E+00	.00E+00	.00E+00	.00E+00
tc 99	3.93E+00	3.93E+00	3.93E+00	3.94E+00	3.95E+00	3.95E+00	3.95E+00	3.95E+00	3.95E+00
tc 99m	2.73E+05	2.73E+05	2.73E+05	2.13E+05	3.79E-05	.00E+00	.00E+00	.00E+00	.00E+00
ru 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb100	1.77E-05	1.77E-05	1.77E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr100	1.37E-02	1.37E-02	1.37E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y100	2.62E-01	2.62E-01	2.62E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay — fission products — page 29

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nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtms for grams

	charge	discharge	.0 d	1.0 d	90.0 d	365.3 d	730.5 d	1826.3 d	3652.5 d
zr100	2.24E+00	2.24E+00	2.24E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb100	2.43E+00	2.43E+00	2.43E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb100m	1.95E-01	1.95E-01	1.95E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc100	3.88E-01	3.88E-01	3.88E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb101	1.43E-07	1.43E-07	1.43E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr101	2.06E-03	2.06E-03	2.06E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y101	1.32E-01	1.32E-01	1.32E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr101	1.25E+00	1.25E+00	1.25E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb101	2.14E+00	2.14E+00	2.14E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo101	2.27E+00	2.27E+00	2.27E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc101	2.28E+00	2.28E+00	2.28E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr102	3.50E-04	3.50E-04	3.50E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y102	6.14E-02	6.14E-02	6.14E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr102	8.93E-01	8.93E-01	8.93E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb102	1.82E+00	1.82E+00	1.82E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo102	2.14E+00	2.14E+00	2.14E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102	2.14E+00	2.14E+00	2.14E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102m	2.19E-03	2.19E-03	2.19E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh102	2.62E-01	2.62E-01	2.62E-01	2.62E-01	2.47E-01	2.07E-01	1.63E-01	7.94E-02	2.46E-02
pd102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr103	2.83E-06	2.83E-06	2.83E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y103	1.83E-02	1.83E-02	1.83E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr103	3.27E-01	3.27E-01	3.27E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb103	1.33E+00	1.33E+00	1.33E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo103	2.05E+00	2.05E+00	2.05E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc103	2.09E+00	2.09E+00	2.09E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru103	2.97E+05	2.97E+05	2.97E+05	2.92E+05	6.06E+04	4.70E+02	7.44E-01	2.95E-09	2.95E-23
rh103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103m	2.96E+05	2.96E+05	2.96E+05	2.91E+05	6.03E+04	4.68E+02	7.42E-01	2.94E-09	2.92E-23
sr104	8.91E-07	8.91E-07	8.91E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y104	5.07E-04	5.07E-04	5.07E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr104	9.55E-02	9.55E-02	9.55E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb104	5.99E-01	5.99E-01	5.99E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo104	1.59E+00	1.59E+00	1.59E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc104	1.67E+00	1.67E+00	1.67E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104	8.34E-01	8.34E-01	8.34E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104m	6.09E-02	6.09E-02	6.09E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

y105	6.30E-06	6.30E-06	6.30E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr105	2.78E-02	2.78E-02	2.78E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb105	2.38E-01	2.38E-01	2.38E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo105	1.15E+00	1.15E+00	1.15E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc105	1.37E+00	1.37E+00	1.37E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru105	4.88E+03	4.88E+03	4.88E+03	1.15E+02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105	1.40E+05	1.40E+05	1.40E+05	8.81E+04	5.77E-14	.00E+00	.00E+00	.00E+00	.00E+00
rh105m	1.39E+03	1.39E+03	1.39E+03	3.28E+01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 30

0 nuclide radioactivity, curies

basis =per B&W assembly, 0.409 mtm for grams

	charge	discharge	.0 d	1.0 d	30.0 d	365.3 d	730.5 d	1826.3 d	3652.5 d
y106	1.13E-07	1.13E-07	1.13E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr106	1.28E-03	1.28E-03	1.28E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb106	4.44E-02	4.44E-02	4.44E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo106	6.21E-01	6.21E-01	6.21E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc106	9.46E-01	9.46E-01	9.46E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru106	1.12E+05	1.12E+05	1.12E+05	1.11E+05	9.43E+04	5.64E+04	2.86E+04	3.70E+03	1.23E+02
rh106	1.12E+05	1.12E+05	1.12E+05	1.11E+05	9.43E+04	5.64E+04	2.86E+04	3.70E+03	1.23E+02
rh106m	7.06E-01	7.06E-01	7.06E-01	3.27E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag106	1.37E-12	1.37E-12	1.37E-12	1.19E-30	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y107	1.03E-09	1.03E-09	1.03E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr107	1.26E-05	1.26E-05	1.26E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb107	7.84E-03	7.84E-03	7.84E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo107	2.46E-01	2.46E-01	2.46E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc107	6.38E-01	6.38E-01	6.38E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru107	7.72E-01	7.72E-01	7.72E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh107	7.74E-01	7.74E-01	7.74E-01	1.00E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd107	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02
pd107m	2.22E-03	2.22E-03	2.22E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr108	5.09E-07	5.09E-07	5.09E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb108	2.41E-04	2.41E-04	2.41E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo108	3.49E-02	3.49E-02	3.49E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc108	2.14E-01	2.14E-01	2.14E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru108	4.87E-01	4.87E-01	4.87E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108	4.95E-01	4.95E-01	4.95E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108m	8.11E-03	8.11E-03	8.11E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag108	9.67E-05	9.67E-05	9.67E-05	9.56E-05	9.54E-05	9.50E-05	9.45E-05	9.30E-05	9.05E-05
ag108m	1.10E-03	1.10E-03	1.10E-03	1.10E-03	1.10E-03	1.09E-03	1.09E-03	1.07E-03	1.04E-03
cd108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr109	3.66E-10	3.66E-10	3.66E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb109	9.56E-06	9.56E-06	9.56E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo109	3.65E-03	3.65E-03	3.65E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc109	7.18E-02	7.18E-02	7.18E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru109	3.33E-01	3.33E-01	3.33E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109	3.88E-01	3.88E-01	3.88E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109m	1.94E-01	1.94E-01	1.94E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109	1.86E+04	1.86E+04	1.86E+04	5.51E+03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109m	1.86E-03	1.86E-03	1.86E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109m	1.86E+04	1.86E+04	1.86E+04	5.52E+03	7.43E-05	4.92E-05	2.85E-05	5.51E-06	3.57E-07
cd109	8.51E-05	8.51E-05	8.51E-05	8.49E-05	7.43E-05	4.92E-05	2.85E-05	5.51E-06	3.57E-07
rb110	3.81E-07	3.81E-07	3.81E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo110	3.80E-04	3.80E-04	3.80E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc110	1.09E-02	1.09E-02	1.09E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

ru110	1.03E-01	1.03E-01	1.03E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110	1.80E-02	1.80E-02	1.80E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110m	1.21E-01	1.21E-01	1.21E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag110	6.83E+00	6.83E+00	6.83E+00	6.67E+00	5.21E+00	2.43E+00	8.81E-01	4.21E-02	2.66E-04
ag110m	4.92E+02	4.92E+02	4.92E+02	4.91E+02	3.83E+02	1.79E+02	6.48E+01	3.10E+00	1.95E-02

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 31

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nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtms for grams

	charge	discharge	.0 d	1.0 d	90.0 d	365.3 d	730.5 d	1826.3 d	3652.5 d
cd110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb111	2.67E-09	2.67E-09	2.67E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo111	3.33E-05	3.33E-05	3.33E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc111	2.08E-03	2.08E-03	2.08E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru111	3.38E-02	3.38E-02	3.38E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh111	6.78E-02	6.78E-02	6.78E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111	1.83E+01	1.83E+01	1.83E+01	8.84E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111m	2.32E+01	2.32E+01	2.32E+01	1.13E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111	9.60E+03	9.60E+03	9.60E+03	8.75E+03	2.22E+00	1.68E-11	2.92E-26	.00E+00	.00E+00
ag111m	2.27E+01	2.27E+01	2.27E+01	1.10E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111m	5.75E-05	5.75E-05	5.75E-05	6.92E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb112	9.13E-11	9.13E-11	9.13E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo112	4.31E-06	4.31E-06	4.31E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc112	3.36E-04	3.36E-04	3.36E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru112	1.12E-02	1.12E-02	1.12E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh112	2.71E-02	2.71E-02	2.71E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd112	2.22E+03	2.22E+03	2.22E+03	1.01E+03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag112	2.60E+03	2.60E+03	2.60E+03	1.18E+03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo113	8.04E-08	8.04E-08	8.04E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc113	7.67E-05	7.67E-05	7.67E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru113	3.50E-03	3.50E-03	3.50E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh113	1.29E-02	1.29E-02	1.29E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd113	1.94E-02	1.94E-02	1.94E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113	1.24E+02	1.24E+02	1.24E+02	5.62E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113m	3.78E-03	3.78E-03	3.78E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd113	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14
cd113m	6.30E+00	6.30E+00	6.30E+00	6.30E+00	6.22E+00	5.99E+00	5.77E+00	4.92E+00	3.85E+00
in113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in113m	1.50E-10	1.50E-10	1.50E-10	6.61E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo114	4.01E-08	4.01E-08	4.01E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc114	1.16E-05	1.16E-05	1.16E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru114	1.28E-03	1.28E-03	1.28E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh114	6.58E-03	6.58E-03	6.58E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd114	1.54E-02	1.54E-02	1.54E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag114	1.60E-02	1.60E-02	1.60E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114	2.08E-01	2.08E-01	2.08E-01	2.08E-01	5.83E-02	1.24E-03	7.44E-06	1.62E-12	1.28E-23
in114m	2.15E-01	2.15E-01	2.15E-01	2.12E-01	6.09E-02	1.29E-03	7.78E-06	1.69E-12	1.34E-23
sn114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo115	1.75E-10	1.75E-10	1.75E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc115	3.93E-07	3.93E-07	3.93E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru115	2.85E-04	2.85E-04	2.85E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh115	2.69E-03	2.69E-03	2.69E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd115	9.34E-03	9.34E-03	9.34E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115	7.40E-03	7.40E-03	7.40E-03	1.62E-24	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115m	3.10E-03	3.10E-03	3.10E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115	1.11E+03	1.11E+03	1.11E+03	8.15E+02	7.69E-10	.00E+00	.00E+00	.00E+00	.00E+00

cd115m	6.73E+01	6.73E+01	6.73E+01	6.63E+01	1.66E+01	2.30E-01	7.85E-04	3.16E-11	1.49E-23
in115	3.20E-12	3.20E-12	3.20E-12	3.21E-12	3.23E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12
in115m	1.21E+03	1.21E+03	1.21E+03	8.85E+02	1.84E-03	2.55E-05	8.71E-08	3.50E-15	1.64E-27

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Part B BW 15x15, 3.00wt%, 20gwd/mtu decay fission products page 32

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nuclide radioactivity, curies
basis =per BW assembly, 0.409 mtm for grams

	charge	discharge	.0 d	1.0 d	30.0 d	365.3 d	730.5 d	1826.3 d	3652.5 d
sn115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc116	1.65E-07	1.65E-07	1.65E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru116	9.28E-05	9.28E-05	9.28E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh116	1.34E-03	1.34E-03	1.34E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd116	1.03E-02	1.03E-02	1.03E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116	1.18E-02	1.18E-02	1.18E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116m	1.49E-03	1.49E-03	1.49E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116	1.65E-03	1.65E-03	1.65E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116m	6.20E-03	6.20E-03	6.20E-03	6.13E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc117	2.02E-09	2.02E-09	2.02E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru117	1.44E-05	1.44E-05	1.44E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh117	5.21E-04	5.21E-04	5.21E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd117	6.95E-03	6.95E-03	6.95E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117	6.17E-03	6.17E-03	6.17E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117m	6.17E-03	6.17E-03	6.17E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117	1.95E+00	1.95E+00	1.95E+00	2.50E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117m	2.55E+00	2.55E+00	2.55E+00	1.81E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117	8.25E+00	8.25E+00	8.25E+00	2.93E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117m	7.32E+00	7.32E+00	7.32E+00	1.24E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117m	7.78E+00	7.78E+00	7.78E+00	7.37E+00	7.90E-02	6.38E-08	5.25E-16	.00E+00	.00E+00
tc118	5.98E-11	5.98E-11	5.98E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru118	2.36E-06	2.36E-06	2.36E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh118	1.24E-04	1.24E-04	1.24E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd118	3.32E-03	3.32E-03	3.32E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118	5.72E-03	5.72E-03	5.72E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118m	4.08E-03	4.08E-03	4.08E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd118	1.00E-02	1.00E-02	1.00E-02	2.42E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118	1.00E-02	1.00E-02	1.00E-02	2.42E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118m	1.30E-05	1.30E-05	1.30E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru119	3.02E-07	3.02E-07	3.02E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh119	4.28E-05	4.28E-05	4.28E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd119	1.69E-03	1.69E-03	1.69E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag119	6.48E-03	6.48E-03	6.48E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119	7.00E-03	7.00E-03	7.00E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119m	3.37E-03	3.37E-03	3.37E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119	4.39E-03	4.39E-03	4.39E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119m	6.34E-03	6.34E-03	6.34E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn119m	8.56E+00	8.56E+00	8.56E+00	8.54E+00	6.92E+00	3.61E+00	1.52E+00	1.14E-01	1.52E-03
ru120	3.84E-08	3.84E-08	3.84E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh120	9.85E-06	9.85E-06	9.85E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd120	9.45E-04	9.45E-04	9.45E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag120	4.36E-03	4.36E-03	4.36E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd120	9.80E-03	9.80E-03	9.80E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120	9.97E-03	9.97E-03	9.97E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120m	1.78E-04	1.78E-04	1.78E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh121	2.72E-06	2.72E-06	2.72E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 33

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

	charge	discharge	.0 d	1.0 d	90.0 d	366.3 d	730.5 d	1826.3 d	3652.5 d
pd121	3.95E-04	3.95E-04	3.95E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag121	3.12E-03	3.12E-03	3.12E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd121	9.79E-03	9.79E-03	9.79E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121	9.46E-04	9.46E-04	9.46E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121m	9.98E-03	9.98E-03	9.98E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn121	8.45E+02	8.45E+02	8.45E+02	4.57E+02	4.47E-01	4.43E-01	4.38E-01	4.21E-01	3.98E-01
sn121m	5.78E-01	5.78E-01	5.78E-01	5.78E-01	5.77E-01	5.71E-01	5.64E-01	5.43E-01	5.10E-01
sb121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh122	3.00E-07	3.00E-07	3.00E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd122	1.30E-04	1.30E-04	1.30E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag122	1.61E-03	1.61E-03	1.61E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd122	1.06E-02	1.06E-02	1.06E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122	1.17E-02	1.17E-02	1.17E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122m	1.21E-03	1.21E-03	1.21E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb122	1.00E+02	1.00E+02	1.00E+02	7.87E+01	9.42E-09	.00E+00	.00E+00	.00E+00	.00E+00
sb122m	9.06E-05	9.06E-05	9.06E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh123	2.55E-08	2.55E-08	2.55E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd123	2.26E-05	2.26E-05	2.26E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag123	6.40E-04	6.40E-04	6.40E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd123	6.74E-03	6.74E-03	6.74E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123	8.68E-03	8.68E-03	8.68E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123m	2.36E-03	2.36E-03	2.36E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123	1.25E+02	1.25E+02	1.25E+02	1.28E+02	7.94E+01	1.81E+01	2.55E+00	7.14E-03	3.98E-07
sn123m	1.13E-02	1.13E-02	1.13E-02	1.75E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te123	7.00E-14	7.00E-14	7.00E-14	7.00E-14	7.67E-14	8.44E-14	8.61E-14	8.63E-14	8.63E-14
te123m	6.10E-01	6.10E-01	6.10E-01	6.07E-01	3.62E-01	7.36E-02	8.87E-03	1.56E-05	3.98E-10
pd124	1.22E-05	1.22E-05	1.22E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag124	4.91E-04	4.91E-04	4.91E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd124	1.04E-02	1.04E-02	1.04E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in124	1.95E-02	1.95E-02	1.95E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb124	9.48E+01	9.48E+01	9.48E+01	9.37E+01	3.36E+01	1.41E+00	2.11E-02	6.98E-08	5.14E-17
sb124m	1.66E-05	1.66E-05	1.66E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd125	2.98E-06	2.98E-06	2.98E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag125	2.21E-04	2.21E-04	2.21E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd125	6.43E-03	6.43E-03	6.43E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125	1.11E-02	1.11E-02	1.11E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125m	8.50E-03	8.50E-03	8.50E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125	8.84E+02	8.84E+02	8.84E+02	8.22E+02	1.37E+00	3.47E-09	1.36E-28	.00E+00	.00E+00
sn125m	2.01E-02	2.01E-02	2.01E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb125	1.94E+03	1.94E+03	1.94E+03	1.94E+03	1.83E+03	1.51E+03	1.17E+03	5.46E+02	1.54E+02
te125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te125m	4.19E+02	4.19E+02	4.19E+02	4.20E+02	4.27E+02	3.68E+02	2.85E+02	1.33E+02	3.75E+01
pd126	6.66E-07	6.66E-07	6.66E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag126	9.69E-05	9.69E-05	9.69E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd126	7.50E-03	7.50E-03	7.50E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in126	2.60E-02	2.60E-02	2.60E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn126	1.39E-01	1.39E-01	1.39E-01	1.39E-01	1.39E-01	1.39E-01	1.39E-01	1.39E-01	1.39E-01

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 34

0 nuclide radioactivity, curies

basis =per BBU assembly, 0.409 mtHM for grams

	charge	discharge	.0 d	1.0 d	30.0 d	365.3 d	730.5 d	1826.3 d	3652.5 d
sb126	6.04E+01	6.04E+01	6.04E+01	5.71E+01	4.13E-01	1.94E-02	1.94E-02	1.94E-02	1.94E-02
sb126m	1.39E-01	1.39E-01	1.39E-01	1.39E-01	1.39E-01	1.39E-01	1.39E-01	1.39E-01	1.39E-01
te126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag127	5.37E-05	5.37E-05	5.37E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd127	5.71E-03	5.71E-03	5.71E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127	2.32E-02	2.32E-02	2.32E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127m	2.32E-02	2.32E-02	2.32E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127	2.48E+00	2.48E+00	2.48E+00	9.01E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127m	6.18E-02	6.18E-02	6.18E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb127	1.40E+04	1.40E+04	1.40E+04	1.17E+04	1.29E-03	3.84E-25	.00E+00	.00E+00	.00E+00
te127	1.53E+04	1.53E+04	1.53E+04	1.34E+04	1.58E+03	2.75E+02	2.70E+01	2.54E-02	2.30E-07
te127m	2.78E+03	2.78E+03	2.78E+03	2.77E+03	1.62E+03	2.81E+02	2.75E+01	2.59E-02	2.35E-07
i127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe127	4.03E-03	4.03E-03	4.03E-03	3.95E-03	7.26E-04	3.84E-06	3.66E-09	3.18E-18	.00E+00
ag128	2.58E-05	2.58E-05	2.58E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd128	5.32E-03	5.32E-03	5.32E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in128	4.16E-02	4.16E-02	4.16E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn128	1.90E-01	1.90E-01	1.90E-01	8.80E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128	4.82E+02	4.82E+02	4.82E+02	7.60E+01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128m	2.02E-01	2.02E-01	2.02E-01	1.07E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i128	7.94E-03	7.94E-03	7.94E-03	3.54E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd129	2.65E-03	2.65E-03	2.65E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in129	4.79E-02	4.79E-02	4.79E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129	1.67E-01	1.67E-01	1.67E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129m	1.63E-01	1.63E-01	1.63E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb129	1.45E+03	1.45E+03	1.45E+03	3.31E+01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129	9.20E+03	9.20E+03	9.20E+03	7.47E+03	1.18E+03	4.05E+00	2.16E-03	3.29E-13	1.43E-29
te129m	1.18E+04	1.18E+04	1.18E+04	1.16E+04	1.85E+03	6.32E+00	3.37E-03	5.14E-13	2.23E-29
i129	8.75E-03	8.75E-03	8.75E-03	8.75E-03	8.81E-03	8.82E-03	8.82E-03	8.82E-03	8.82E-03
xe129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe129m	2.18E+00	2.18E+00	2.18E+00	2.02E+00	1.96E-03	9.36E-13	4.01E-25	.00E+00	.00E+00
cd130	9.79E-04	9.79E-04	9.79E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in130	3.47E-02	3.47E-02	3.47E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn130	4.51E-01	4.51E-01	4.51E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130	1.44E-01	1.44E-01	1.44E-01	1.53E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130m	6.04E-01	6.04E-01	6.04E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130	6.69E+02	6.69E+02	6.69E+02	1.74E+02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130m	9.20E-03	9.20E-03	9.20E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd131	1.52E-04	1.52E-04	1.52E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in131	1.50E-02	1.50E-02	1.50E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn131	3.83E-01	3.83E-01	3.83E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb131	1.06E+00	1.06E+00	1.06E+00	1.52E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131	5.02E+03	5.02E+03	5.02E+03	2.88E+03	1.06E-18	.00E+00	.00E+00	.00E+00	.00E+00
te131m	2.23E+04	2.23E+04	2.23E+04	1.28E+04	4.72E-18	.00E+00	.00E+00	.00E+00	.00E+00
i131	1.82E+05	1.82E+05	1.82E+05	1.68E+05	7.93E+01	3.93E-09	8.31E-23	.00E+00	.00E+00
xe131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131m	2.14E+03	2.14E+03	2.14E+03	2.12E+03	3.17E+01	3.64E-06	2.09E-15	.00E+00	.00E+00

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Part B BBU 15x15, 3.00wt%, 20gwd/mtu decay fission products page 35

0 nuclide radioactivity, curies

basis =per BBU assembly, 0.409 mtHM for grams

	charge	discharge	.0 d	1.0 d	30.0 d	365.3 d	730.5 d	1826.3 d	3652.5 d
cd132	1.85E-05	1.85E-05	1.85E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

in132	4.01E-03	4.01E-03	4.01E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn132	3.09E-01	3.09E-01	3.09E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132	6.30E-01	6.30E-01	6.30E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132m	6.08E-01	6.08E-01	6.08E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te132	2.27E+05	2.27E+05	2.27E+05	1.84E+05	1.10E-03	.00E+00	.00E+00	.00E+00	.00E+00
i132	2.34E+05	2.34E+05	2.34E+05	1.89E+05	1.13E-03	.00E+00	.00E+00	.00E+00	.00E+00
xe132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs132	5.49E+00	5.49E+00	5.49E+00	4.93E+00	3.61E-04	5.88E-17	.00E+00	.00E+00	.00E+00
ba132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in133	1.28E-04	1.28E-04	1.28E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn133	8.44E-02	8.44E-02	8.44E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb133	8.69E-01	8.69E-01	8.69E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133	1.50E+00	1.50E+00	1.50E+00	4.20E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133m	1.24E+00	1.24E+00	1.24E+00	1.85E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133	1.86E+05	1.86E+05	1.86E+05	8.36E+04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133m	2.11E-01	2.11E-01	2.11E-01	1.90E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133	3.78E+05	3.78E+05	3.78E+05	3.48E+05	2.88E+00	4.53E-16	.00E+00	.00E+00	.00E+00
xe133m	1.14E+04	1.14E+04	1.14E+04	9.29E+03	6.33E-09	.00E+00	.00E+00	.00E+00	.00E+00
cs133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba133	6.44E-06	6.44E-06	6.44E-06	6.44E-06	6.34E-06	6.03E-06	5.65E-06	4.63E-06	3.33E-06
in134	2.14E-05	2.14E-05	2.14E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn134	1.43E-02	1.43E-02	1.43E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134	1.59E-01	1.59E-01	1.59E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134m	1.16E-01	1.16E-01	1.16E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te134	2.44E+00	2.44E+00	2.44E+00	1.04E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134	3.08E+00	3.08E+00	3.08E+00	7.16E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134m	2.67E-01	2.67E-01	2.67E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134m	5.57E-02	5.57E-02	5.57E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134	2.69E+04	2.69E+04	2.69E+04	2.69E+04	2.48E+04	1.93E+04	1.38E+04	5.02E+03	9.34E+02
cs134m	1.78E+01	1.78E+01	1.78E+01	5.79E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn135	1.23E-03	1.23E-03	1.23E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb135	7.30E-02	7.30E-02	7.30E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te135	1.31E+00	1.31E+00	1.31E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i135	3.04E+04	3.04E+04	3.04E+04	2.42E+03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135	1.13E+05	1.13E+05	1.13E+05	2.47E+04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135m	4.97E+03	4.97E+03	4.97E+03	3.95E+02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs135	2.04E-01	2.04E-01	2.04E-01	2.04E-01	2.04E-01	2.04E-01	2.04E-01	2.04E-01	2.04E-01
cs135m	1.87E-02	1.87E-02	1.87E-02	1.24E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135m	1.46E+01	1.46E+01	1.46E+01	8.18E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn136	1.08E-04	1.08E-04	1.08E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb136	1.15E-02	1.15E-02	1.15E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te136	5.86E-01	5.86E-01	5.86E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136	1.20E+00	1.20E+00	1.20E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136m	5.86E-01	5.86E-01	5.86E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs136	9.25E+03	9.25E+03	9.25E+03	8.81E+03	8.11E+01	4.10E-05	1.81E-13	.00E+00	.00E+00
ba136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba136m	1.04E+03	1.04E+03	1.04E+03	9.87E+02	9.09E+00	4.59E-06	2.03E-14	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 36

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtihm for grams

	charge	discharge	.0 d	1.0 d	90.0 d	365.3 d	730.5 d	1826.3 d	3652.5 d
sb137	1.11E-02	1.11E-02	1.11E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te137	1.98E-01	1.98E-01	1.98E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i137	1.28E+00	1.28E+00	1.28E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe137	2.51E+00	2.51E+00	2.51E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

cs137	3.01E+04	3.01E+04	3.01E+04	3.01E+04	2.99E+04	2.96E+04	2.87E+04	2.68E+04	2.39E+04
ba137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba137m	2.84E+04	2.84E+04	2.84E+04	2.84E+04	2.83E+04	2.78E+04	2.71E+04	2.53E+04	2.26E+04
sb138	1.59E-04	1.59E-04	1.59E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te138	4.82E-02	4.82E-02	4.82E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i138	6.48E-01	6.48E-01	6.48E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe138	2.35E+00	2.35E+00	2.35E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138	2.55E+00	2.55E+00	2.55E+00	1.52E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138m	1.08E-01	1.08E-01	1.08E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la138	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11
sb139	1.21E-05	1.21E-05	1.21E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te139	7.63E-03	7.63E-03	7.63E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i139	3.15E-01	3.15E-01	3.15E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe139	1.75E+00	1.75E+00	1.75E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs139	2.38E+00	2.38E+00	2.38E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba139	5.47E+00	5.47E+00	5.47E+00	4.37E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce139	2.12E-02	2.12E-02	2.12E-02	2.11E-02	1.34E-02	3.36E-03	5.34E-04	2.14E-06	2.17E-10
pr139	2.51E-05	2.51E-05	2.51E-05	5.78E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te140	1.12E-03	1.12E-03	1.12E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i140	8.03E-02	8.03E-02	8.03E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe140	1.21E+00	1.21E+00	1.21E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs140	2.13E+00	2.13E+00	2.13E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba140	3.36E+05	3.36E+05	3.36E+05	3.18E+05	2.52E+03	8.03E-04	1.93E-12	.00E+00	.00E+00
la140	3.59E+05	3.59E+05	3.59E+05	3.48E+05	2.91E+03	9.27E-04	2.22E-12	.00E+00	.00E+00
ce140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr140	2.61E-05	2.61E-05	2.61E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te141	1.34E-05	1.34E-05	1.34E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i141	1.08E-02	1.08E-02	1.08E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe141	4.67E-01	4.67E-01	4.67E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs141	1.63E+00	1.63E+00	1.63E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba141	2.22E+00	2.22E+00	2.22E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la141	5.07E+03	5.07E+03	5.07E+03	7.28E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce141	3.21E+05	3.21E+05	3.21E+05	3.15E+05	4.71E+04	1.33E+02	5.50E-02	3.90E-12	4.74E-29
pr141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd141	6.27E-06	6.27E-06	6.27E-06	7.84E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te142	5.27E-06	5.27E-06	5.27E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i142	2.91E-03	2.91E-03	2.91E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe142	1.85E-01	1.85E-01	1.85E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs142	9.41E-01	9.41E-01	9.41E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba142	2.11E+00	2.11E+00	2.11E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la142	8.45E+00	8.45E+00	8.45E+00	1.52E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce142	7.78E-06	7.78E-06	7.78E-06	7.78E-06	7.78E-06	7.78E-06	7.78E-06	7.78E-06	7.78E-06
pr142	2.96E+03	2.96E+03	2.96E+03	1.24E+03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr142m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i143	3.48E-05	3.48E-05	3.48E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 37

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

	charge	discharge	.0 d	1.0 d	90.0 d	365.3 d	730.5 d	1826.3 d	3652.5 d
xe143	2.78E-02	2.78E-02	2.78E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs143	4.77E-01	4.77E-01	4.77E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba143	1.80E+00	1.80E+00	1.80E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la143	2.08E+00	2.08E+00	2.08E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce143	1.85E+05	1.85E+05	1.85E+05	1.12E+05	3.66E-15	.00E+00	.00E+00	.00E+00	.00E+00
pr143	2.92E+05	2.92E+05	2.92E+05	2.85E+05	3.15E+03	2.45E-03	1.92E-11	.00E+00	.00E+00
nd143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

i144	1.40E-06	1.40E-06	1.40E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe144	5.96E-03	5.96E-03	5.96E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs144	1.39E-01	1.39E-01	1.39E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba144	1.40E+00	1.40E+00	1.40E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la144	1.84E+00	1.84E+00	1.84E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce144	2.72E+05	2.72E+05	2.72E+05	2.72E+05	2.19E+05	1.12E+05	4.61E+04	3.21E+03	3.77E+01
pr144	2.72E+05	2.72E+05	2.72E+05	2.72E+05	2.19E+05	1.12E+05	4.61E+04	3.21E+03	3.77E+01
pr144m	3.81E+03	3.81E+03	3.81E+03	3.80E+03	3.06E+03	1.57E+03	6.45E+02	4.49E+01	5.28E-01
nd144	3.05E-10	3.05E-10	3.05E-10	3.05E-10	3.25E-10	3.64E-10	3.85E-10	4.05E-10	4.09E-10
i145	4.38E-08	4.38E-08	4.38E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe145	6.00E-04	6.00E-04	6.00E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs145	3.42E-02	3.42E-02	3.42E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba145	6.22E-01	6.22E-01	6.22E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la145	1.27E+00	1.27E+00	1.27E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce145	1.42E+00	1.42E+00	1.42E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr145	1.30E+04	1.30E+04	1.30E+04	8.04E+02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm145	1.10E-02	1.10E-02	1.10E-02	1.11E-02	1.31E-02	1.73E-02	1.98E-02	2.00E-02	1.67E-02
sm145	2.46E-01	2.46E-01	2.46E-01	2.46E-01	2.05E-01	1.17E-01	5.55E-02	5.95E-03	1.44E-04
xe146	5.41E-05	5.41E-05	5.41E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs146	7.53E-03	7.53E-03	7.53E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba146	3.22E-01	3.22E-01	3.22E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la146	8.26E-01	8.26E-01	8.26E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce146	1.13E+00	1.13E+00	1.13E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr146	1.14E+00	1.14E+00	1.14E+00	2.90E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm146	8.29E-01	8.29E-01	8.29E-01	8.29E-01	8.04E-01	7.32E-01	6.45E-01	4.43E-01	2.37E-01
sm146	4.64E-08	4.64E-08	4.64E-08	4.64E-08	4.68E-08	4.81E-08	4.97E-08	5.34E-08	5.71E-08
xe147	1.70E-07	1.70E-07	1.70E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs147	1.69E-04	1.69E-04	1.69E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba147	5.40E-02	5.40E-02	5.40E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la147	3.55E-01	3.55E-01	3.55E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce147	8.50E-01	8.50E-01	8.50E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr147	8.96E-01	8.96E-01	8.96E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd147	1.23E+05	1.23E+05	1.23E+05	1.15E+05	4.19E+02	1.19E-05	1.14E-15	.00E+00	.00E+00
pm147	5.37E+04	5.37E+04	5.37E+04	5.37E+04	5.14E+04	4.23E+04	3.23E+04	1.47E+04	3.92E+03
sm147	6.95E-07	6.95E-07	6.95E-07	6.96E-07	7.81E-07	1.01E-06	1.23E-06	1.65E-06	1.98E-06
cs148	3.09E-05	3.09E-05	3.09E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba148	1.07E-02	1.07E-02	1.07E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la148	1.12E-01	1.12E-01	1.12E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce148	5.99E-01	5.99E-01	5.99E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr148	6.98E-01	6.98E-01	6.98E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148	2.58E+04	2.58E+04	2.58E+04	2.28E+04	9.38E+01	9.22E-01	2.00E-03	2.09E-11	1.00E-24
pm148m	8.01E+03	8.01E+03	8.01E+03	7.88E+03	1.77E+03	1.74E+01	3.79E-02	3.90E-10	1.90E-23

0 nuclide radioactivity, curies
basis =per BBU assembly, 0.409 mtms for grams

	charge	discharge	.0 d	1.0 d	90.0 d	365.3 d	730.5 d	1826.3 d	3652.5 d
sm148	8.66E-12	8.66E-12	8.66E-12	8.67E-12	8.80E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12
cs149	2.54E-07	2.54E-07	2.54E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba149	1.20E-03	1.20E-03	1.20E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la149	3.21E-02	3.21E-02	3.21E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce149	3.09E-01	3.09E-01	3.09E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr149	4.78E-01	4.78E-01	4.78E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd149	5.38E+00	5.38E+00	5.38E+00	3.49E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm149	7.39E+04	7.39E+04	7.39E+04	5.41E+04	4.17E-08	.00E+00	.00E+00	.00E+00	.00E+00
sm149	2.96E-13	2.96E-13	2.96E-13	3.09E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13
eu149	3.54E-07	3.54E-07	3.54E-07	3.51E-07	1.81E-07	2.33E-08	1.53E-09	4.38E-13	5.41E-19

cs150	3.25E-08	3.25E-08	3.25E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba150	1.08E-04	1.08E-04	1.08E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la150	5.38E-03	5.38E-03	5.38E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce150	1.38E-01	1.38E-01	1.38E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr150	2.95E-01	2.95E-01	2.95E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm150	9.33E-01	9.33E-01	9.33E-01	1.88E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu150	1.43E-05	1.43E-05	1.43E-05	1.43E-05	1.42E-05	1.40E-05	1.37E-05	1.29E-05	1.18E-05
ba151	1.09E-06	1.09E-06	1.09E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la151	9.13E-04	9.13E-04	9.13E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce151	3.94E-02	3.94E-02	3.94E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr151	1.53E-01	1.53E-01	1.53E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd151	2.57E-01	2.57E-01	2.57E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm151	2.12E+04	2.12E+04	2.12E+04	1.18E+04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm151	1.62E+02	1.62E+02	1.62E+02	1.63E+02	1.63E+02	1.62E+02	1.61E+02	1.57E+02	1.51E+02
eu151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba152	5.83E-09	5.83E-09	5.83E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la152	1.24E-05	1.24E-05	1.24E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce152	4.48E-03	4.48E-03	4.48E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr152	4.94E-02	4.94E-02	4.94E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd152	1.71E-01	1.71E-01	1.71E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152	1.78E-01	1.78E-01	1.78E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152m	6.25E-03	6.25E-03	6.25E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu152	4.68E+00	4.68E+00	4.68E+00	4.68E+00	4.62E+00	4.45E+00	4.22E+00	3.61E+00	2.78E+00
eu152m	9.33E+00	9.33E+00	9.33E+00	1.56E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd152	5.34E-13	5.34E-13	5.34E-13	5.35E-13	5.37E-13	5.43E-13	5.50E-13	5.71E-13	6.00E-13
la153	7.27E-06	7.27E-06	7.27E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce153	1.8E-03	1.8E-03	1.8E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr153	2.12E-02	2.12E-02	2.12E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd153	9.7E-02	9.7E-02	9.7E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm153	1.18E-01	1.18E-01	1.18E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm153	4.57E+04	4.57E+04	4.57E+04	3.19E+04	4.07E-10	.00E+00	.00E+00	.00E+00	.00E+00
eu153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd153	2.51E+00	2.51E+00	2.51E+00	2.51E+00	1.94E+00	8.81E-01	3.03E-01	1.33E-02	7.03E-05
la154	1.90E-07	1.90E-07	1.90E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce154	1.88E-04	1.88E-04	1.88E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr154	4.02E-03	4.02E-03	4.02E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd154	4.77E-02	4.77E-02	4.77E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154	6.03E-02	6.03E-02	6.03E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154m	1.26E-02	1.26E-02	1.26E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 39

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nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtHm for grams

	charge	discharge	.0 d	1.0 d	30.0 d	365.3 d	730.5 d	1826.3 d	3652.5 d
sm154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu154	1.97E+03	1.97E+03	1.97E+03	1.97E+03	1.93E+03	1.82E+03	1.68E+03	1.32E+03	8.81E+02
gd154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la155	9.35E-10	9.35E-10	9.35E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce155	1.62E-05	1.62E-05	1.62E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr155	8.82E-04	8.82E-04	8.82E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd155	1.64E-02	1.64E-02	1.64E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm155	3.78E-02	3.78E-02	3.78E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm155	4.59E-02	4.59E-02	4.59E-02	1.73E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu155	1.54E+03	1.54E+03	1.54E+03	1.54E+03	1.48E+03	1.33E+03	1.14E+03	7.34E+02	3.50E+02
gd155m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce156	1.26E-06	1.26E-06	1.26E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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pr156	1.26E-04	1.26E-04	1.26E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd156	5.76E-03	5.76E-03	5.76E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm156	1.88E-02	1.88E-02	1.88E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm156	7.18E+02	7.18E+02	7.18E+02	1.22E+02	.00E+00	.00E+00	.00E+00	.00E+00
eu156	1.66E+04	1.66E+04	1.66E+04	1.59E+04	2.73E+02	9.55E-04	5.49E-11	.00E+00
gd156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce157	5.99E-08	5.99E-08	5.99E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr157	1.90E-05	1.90E-05	1.90E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd157	1.42E-03	1.42E-03	1.42E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm157	8.27E-03	8.27E-03	8.27E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm157	1.78E-02	1.78E-02	1.78E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu157	1.03E+03	1.03E+03	1.03E+03	3.43E+02	.00E+00	.00E+00	.00E+00	.00E+00
gd157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr158	9.90E-07	9.90E-07	9.90E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd158	2.36E-04	2.36E-04	2.36E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm158	2.17E-03	2.17E-03	2.17E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm158	9.07E-03	9.07E-03	9.07E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu158	1.02E-02	1.02E-02	1.02E-02	4.12E-12	.00E+00	.00E+00	.00E+00	.00E+00
gd158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr159	4.03E-08	4.03E-08	4.03E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd159	2.09E-05	2.09E-05	2.09E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm159	4.86E-04	4.86E-04	4.86E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm159	3.64E-03	3.64E-03	3.64E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu159	5.11E-03	5.11E-03	5.11E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd159	3.61E+02	3.61E+02	3.61E+02	1.47E+02	.00E+00	.00E+00	.00E+00	.00E+00
tb159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd160	1.23E-06	1.23E-06	1.23E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm160	5.38E-05	5.38E-05	5.38E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm160	1.07E-03	1.07E-03	1.07E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu160	2.06E-03	2.06E-03	2.06E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb160	9.97E+01	9.97E+01	9.97E+01	9.87E+01	4.21E+01	3.01E+00	9.05E-02	2.48E-06	6.19E-14
dy160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd161	4.71E-08	4.71E-08	4.71E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm161	6.09E-06	6.09E-06	6.09E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm161	2.26E-04	2.26E-04	2.26E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu161	7.86E-04	7.86E-04	7.86E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd161	1.10E-03	1.10E-03	1.10E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb161	1.53E+02	1.53E+02	1.53E+02	1.39E+02	1.82E-02	1.79E-14	2.08E-30	.00E+00	.00E+00

nuclide radioactivity, curies
basis =per BBU assembly, 0.409 mtus for grams

	charge	discharge	.0 d	1.0 d	90.0 d	365.3 d	730.5 d	1826.3 d	3652.5 d
dy161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm162	3.20E-07	3.20E-07	3.20E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm162	3.26E-05	3.26E-05	3.26E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu162	1.98E-04	1.98E-04	1.98E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd162	4.70E-04	4.70E-04	4.70E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162	4.79E-04	4.79E-04	4.79E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162m	7.51E-04	7.51E-04	7.51E-04	4.32E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm163	2.54E-06	2.54E-06	2.54E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu163	3.88E-05	3.88E-05	3.88E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd163	1.66E-04	1.66E-04	1.66E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163	1.91E-04	1.91E-04	1.91E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm164	1.66E-07	1.66E-07	1.66E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu164	4.55E-06	4.55E-06	4.55E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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gd164	4.92E-05	4.92E-05	4.92E-05	5.01E-25	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb164	6.90E-05	6.90E-05	6.90E-05	5.82E-25	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm165	7.46E-09	7.46E-09	7.46E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu165	4.90E-07	4.90E-07	4.90E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd165	1.06E-05	1.06E-05	1.06E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb165	2.36E-05	2.36E-05	2.36E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165	2.05E-02	2.05E-02	2.05E-02	1.65E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165m	1.31E-04	1.31E-04	1.31E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy166	4.93E-01	4.93E-01	4.93E-01	4.00E-01	5.31E-09	.00E+00	.00E+00	.00E+00	.00E+00
ho166	2.53E+00	2.53E+00	2.53E+00	1.54E+00	7.91E-09	.00E+00	.00E+00	.00E+00	.00E+00
ho166m	4.27E-05	4.27E-05	4.27E-05	4.27E-05	4.27E-05	4.27E-05	4.27E-05	4.26E-05	4.25E-05
er166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er167	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er167m	1.29E-10	1.29E-10	1.29E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er169	9.37E-04	9.37E-04	9.37E-04	8.71E-04	1.23E-06	1.89E-15	3.79E-27	.00E+00	.00E+00
tm169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170	5.77E-06	5.77E-06	5.77E-06	5.74E-06	3.55E-06	8.06E-07	1.12E-07	3.06E-10	1.62E-14
tm170m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er171	1.53E-04	1.53E-04	1.53E-04	1.67E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm171	7.42E-04	7.42E-04	7.42E-04	7.42E-04	6.79E-04	5.17E-04	3.61E-04	1.22E-04	2.01E-05
yb171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er172	6.25E-04	6.25E-04	6.25E-04	4.46E-04	4.05E-17	.00E+00	.00E+00	.00E+00	.00E+00
tm172	8.76E-04	8.76E-04	8.76E-04	7.96E-04	1.82E-13	.00E+00	.00E+00	.00E+00	.00E+00
yb172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	7.20E+06	7.20E+06	7.20E+06	6.07E+06	1.48E+06	5.36E+05	3.03E+05	1.31E+05	9.05E+04

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay actinides page 44

0 nuclide radioactivity, curies

basis =per B&W assembly, 0.409 mtm for grams

	initial	15.0 yr	20.0 yr	30.0 yr	50.0 yr	100.0 yr	150.0 yr	200.0 yr	250.0 yr	300.0 yr	400.0 yr
he 4	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tl206	2.83E-14	7.03E-14	1.41E-13	3.88E-13	1.43E-12	8.23E-12	2.20E-11	4.34E-11	7.26E-11	1.10E-10	2.07E-10
tl207	4.37E-06	6.17E-06	7.92E-06	1.13E-05	1.77E-05	3.28E-05	4.70E-05	6.14E-05	7.57E-05	9.01E-05	1.19E-04
tl208	3.34E-03	3.63E-03	3.80E-03	3.32E-03	2.73E-03	1.66E-03	1.01E-03	6.19E-04	3.74E-04	2.28E-04	8.46E-05
tl209	3.60E-10	4.93E-10	6.45E-10	1.01E-09	1.96E-09	5.89E-09	1.23E-08	2.14E-08	3.42E-08	5.03E-08	9.43E-08
pb206	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb207	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb209	1.71E-08	2.35E-08	3.07E-08	4.79E-08	9.36E-08	2.80E-07	5.86E-07	1.03E-06	1.63E-06	2.39E-06	4.49E-06
pb210	2.13E-08	5.32E-08	1.06E-07	2.94E-07	1.09E-06	6.23E-06	1.67E-05	3.25E-05	5.50E-05	8.30E-05	1.57E-04
pb211	4.38E-06	6.19E-06	7.95E-06	1.13E-05	1.77E-05	3.26E-05	4.72E-05	6.16E-05	7.59E-05	9.03E-05	1.19E-04
pb212	9.25E-03	1.01E-02	1.00E-02	9.24E-03	7.60E-03	4.63E-03	2.81E-03	1.71E-03	1.04E-03	6.34E-04	2.35E-04
pb214	1.68E-07	3.22E-07	5.28E-07	1.10E-06	2.87E-06	1.12E-05	2.52E-05	4.52E-05	7.11E-05	1.03E-04	1.84E-04
bi208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi209	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210	2.13E-08	5.32E-08	1.06E-07	2.94E-07	1.09E-06	6.23E-06	1.67E-05	3.25E-05	5.50E-05	8.30E-05	1.57E-04
bi211	4.38E-06	6.19E-06	7.95E-06	1.13E-05	1.77E-05	3.26E-05	4.72E-05	6.16E-05	7.59E-05	9.03E-05	1.19E-04
bi212	9.25E-03	1.01E-02	1.00E-02	9.24E-03	7.60E-03	4.63E-03	2.81E-03	1.71E-03	1.04E-03	6.34E-04	2.35E-04
bi213	1.71E-08	2.35E-08	3.07E-08	4.79E-08	9.36E-08	2.80E-07	5.86E-07	1.03E-06	1.63E-06	2.39E-06	4.49E-06
bi214	1.68E-07	3.22E-07	5.28E-07	1.10E-06	2.87E-06	1.12E-05	2.52E-05	4.52E-05	7.11E-05	1.03E-04	1.84E-04
po210	2.13E-08	5.32E-08	1.07E-07	2.94E-07	1.09E-06	6.23E-06	1.67E-05	3.25E-05	5.50E-05	8.30E-05	1.57E-04

pa211m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pa211	1.20E-08	1.70E-08	2.18E-08	3.11E-08	4.87E-08	8.98E-08	1.30E-07	1.69E-07	2.09E-07	2.48E-07	3.27E-07	
pa212	5.95E-03	6.46E-03	6.42E-03	5.90E-03	4.87E-03	2.96E-03	1.80E-03	1.10E-03	6.67E-04	4.06E-04	1.51E-04	
pa213	1.68E-08	2.30E-08	3.01E-08	4.69E-08	9.16E-08	2.74E-07	5.74E-07	1.01E-06	1.95E-06	2.34E-06	4.40E-06	
pa214	1.68E-07	3.22E-07	5.28E-07	1.10E-06	2.87E-06	1.12E-05	2.52E-05	4.52E-05	7.11E-05	1.03E-04	1.84E-04	
pa215	4.38E-06	6.19E-06	7.95E-06	1.13E-05	1.77E-05	3.26E-05	4.72E-05	6.14E-05	7.59E-05	9.03E-05	1.19E-04	
pa216	9.29E-03	1.01E-02	1.00E-02	9.24E-03	7.60E-03	4.62E-03	2.81E-03	1.71E-03	1.04E-03	6.34E-04	2.35E-04	
pa218	1.68E-07	3.23E-07	5.28E-07	1.10E-06	2.87E-06	1.12E-05	2.53E-05	4.52E-05	7.11E-05	1.03E-04	1.84E-04	
at217	1.71E-08	2.35E-08	3.07E-08	4.79E-08	9.34E-08	2.80E-07	5.86E-07	1.03E-06	1.63E-06	2.35E-06	4.49E-06	
rn218	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
rn219	4.38E-06	6.19E-06	7.95E-06	1.13E-05	1.77E-05	3.26E-05	4.72E-05	6.14E-05	7.59E-05	9.03E-05	1.19E-04	
rn220	9.29E-03	1.01E-02	1.00E-02	9.24E-03	7.60E-03	4.62E-03	2.81E-03	1.71E-03	1.04E-03	6.34E-04	2.35E-04	
rn222	1.68E-07	3.23E-07	5.28E-07	1.10E-06	2.87E-06	1.12E-05	2.53E-05	4.52E-05	7.11E-05	1.03E-04	1.84E-04	
fr221	1.71E-08	2.35E-08	3.07E-08	4.79E-08	9.34E-08	2.80E-07	5.86E-07	1.03E-06	1.63E-06	2.35E-06	4.49E-06	
fr223	6.03E-08	8.53E-08	1.09E-07	1.56E-07	2.44E-07	4.50E-07	6.50E-07	8.49E-07	1.05E-06	1.25E-06	1.64E-06	
ra222	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
ra223	4.38E-06	6.19E-06	7.95E-06	1.13E-05	1.77E-05	3.26E-05	4.72E-05	6.14E-05	7.59E-05	9.03E-05	1.19E-04	
ra224	9.25E-03	1.01E-02	1.00E-02	9.24E-03	7.60E-03	4.62E-03	2.81E-03	1.71E-03	1.04E-03	6.34E-04	2.35E-04	
ra225	1.71E-08	2.35E-08	3.07E-08	4.79E-08	9.34E-08	2.80E-07	5.86E-07	1.03E-06	1.63E-06	2.35E-06	4.49E-06	
ra226	1.68E-07	3.23E-07	5.28E-07	1.10E-06	2.87E-06	1.12E-05	2.53E-05	4.52E-05	7.11E-05	1.03E-04	1.84E-04	
ra228	2.58E-11	4.43E-11	6.47E-11	1.08E-10	1.98E-10	4.24E-10	6.51E-10	8.78E-10	1.11E-09	1.33E-09	1.83E-09	
ac225	1.71E-08	2.35E-08	3.07E-08	4.79E-08	9.34E-08	2.80E-07	5.86E-07	1.03E-06	1.63E-06	2.35E-06	4.49E-06	
ac227	4.37E-06	6.18E-06	7.95E-06	1.13E-05	1.77E-05	3.26E-05	4.71E-05	6.15E-05	7.59E-05	9.03E-05	1.19E-04	
ac228	2.58E-11	4.43E-11	6.47E-11	1.08E-10	1.98E-10	4.24E-10	6.51E-10	8.78E-10	1.11E-09	1.33E-09	1.83E-09	
th226	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
th227	4.32E-06	6.10E-06	7.84E-06	1.12E-05	1.75E-05	3.22E-05	4.65E-05	6.07E-05	7.49E-05	8.91E-05	1.17E-04	
th228	9.28E-03	1.01E-02	1.00E-02	9.24E-03	7.60E-03	4.62E-03	2.81E-03	1.71E-03	1.04E-03	6.34E-04	2.35E-04	
th229	1.71E-08	2.35E-08	3.07E-08	4.79E-08	9.34E-08	2.80E-07	5.86E-07	1.03E-06	1.63E-06	2.35E-06	4.49E-06	
th230	5.96E-05	8.34E-05	1.08E-04	1.57E-04	2.58E-04	5.26E-04	8.10E-04	1.10E-03	1.40E-03	1.71E-03	2.33E-03	
th231	1.36E-02	1.36E-02	1.36E-02	1.36E-02	1.36E-02	1.36E-02	1.36E-02	1.37E-02	1.37E-02	1.37E-02	1.37E-02	

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Part B BSW 15x15, 3.00wt%, 20gw/mtu decay actinides page 45

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nuclide radioactivity, curies
basis per BSW assembly, 0.409 atm for gases

	initial	15.0 yr	20.0 yr	30.0 yr	50.0 yr	100.0 yr	150.0 yr	200.0 yr	250.0 yr	300.0 yr	400.0 yr
th232	5.44E-11	7.69E-11	9.95E-11	1.45E-10	2.35E-10	4.61E-10	6.88E-10	9.16E-10	1.14E-09	1.37E-09	1.83E-09
th233	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th234	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
pa231	1.59E-05	1.74E-05	1.88E-05	2.17E-05	2.74E-05	4.18E-05	5.62E-05	7.05E-05	8.46E-05	9.93E-05	1.28E-04
pa232	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pa233	9.15E-02	9.26E-02	9.40E-02	9.72E-02	1.05E-01	1.26E-01	1.45E-01	1.64E-01	1.81E-01	1.98E-01	2.24E-01
pa234m	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
pa234	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04
pa235	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u230	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u231	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u232	1.00E-02	1.00E-02	9.87E-03	9.00E-03	7.38E-03	4.49E-03	2.73E-03	1.66E-03	1.01E-03	6.17E-04	2.29E-04
u233	1.35E-05	1.55E-05	1.75E-05	2.17E-05	3.04E-05	5.55E-05	8.50E-05	1.19E-04	1.54E-04	1.97E-04	2.86E-04
u234	5.15E-01	5.22E-01	5.28E-01	5.40E-01	5.62E-01	6.08E-01	6.30E-01	6.49E-01	6.62E-01	6.70E-01	6.80E-01
u235	1.36E-02	1.36E-02	1.36E-02	1.36E-02	1.36E-02	1.36E-02	1.36E-02	1.37E-02	1.37E-02	1.37E-02	1.37E-02
u236	9.15E-02	9.15E-02	9.15E-02	9.14E-02	9.17E-02	9.19E-02	9.21E-02	9.23E-02	9.26E-02	9.28E-02	9.32E-02
u237	6.18E-01	4.86E-01	3.81E-01	2.35E-01	8.95E-02	7.99E-03	7.14E-04	6.39E-05	5.88E-06	6.92E-07	1.86E-07
u238	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
u239	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u240	5.72E-16	8.48E-16	1.12E-15	1.68E-15	2.78E-15	5.55E-15	8.31E-15	1.11E-14	1.38E-14	1.66E-14	2.21E-14
u241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np235	7.52E-06	3.08E-07	1.26E-08	2.11E-11	5.94E-17	7.99E-31	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236	4.88E-06	4.88E-06	4.88E-06	4.88E-06	4.88E-06	4.88E-06	4.88E-06	4.88E-06	4.88E-06	4.88E-06	4.87E-06
np237	9.15E-02	9.26E-02	9.40E-02	9.72E-02	1.05E-01	1.26E-01	1.45E-01	1.64E-01	1.81E-01	1.98E-01	2.24E-01

np238	1.94E-02	1.88E-02	1.88E-02	1.76E-02	1.59E-02	1.25E-02	9.76E-03	7.62E-03	5.98E-03	4.66E-03	2.85E-03
np239	2.01E+00	2.01E+00	2.01E+00	2.01E+00	2.00E+00	2.00E+00	1.99E+00	1.98E+00	1.97E+00	1.96E+00	1.94E+00
np240m	5.72E-16	8.48E-16	1.12E-15	1.68E-15	2.78E-15	5.55E-15	8.31E-15	1.11E-14	1.38E-14	1.66E-14	2.21E-14
np240	6.86E-19	1.02E-18	1.35E-18	2.01E-18	3.34E-18	6.66E-18	9.97E-18	1.33E-17	1.66E-17	1.99E-17	2.66E-17
np241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu236	1.88E-02	5.69E-03	1.72E-03	1.58E-04	1.76E-06	4.35E-07	4.34E-07	4.34E-07	4.34E-07	4.34E-07	4.34E-07
pu237	6.11E-26	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu238	4.82E+02	4.64E+02	4.44E+02	4.12E+02	3.52E+02	2.38E+02	1.61E+02	1.09E+02	7.38E+01	5.00E+01	2.31E+01
pu239	1.63E+02	1.63E+02	1.63E+02	1.63E+02	1.63E+02	1.63E+02	1.63E+02	1.63E+02	1.62E+02	1.62E+02	1.62E+02
pu240	1.53E+02	1.52E+02	1.52E+02	1.52E+02	1.52E+02	1.51E+02	1.51E+02	1.50E+02	1.49E+02	1.48E+02	1.47E+02
pu241	2.58E+04	2.03E+04	1.59E+04	9.83E+03	3.74E+03	3.34E+02	2.98E+01	2.67E+00	2.46E-01	2.89E-02	7.80E-03
pu242	2.80E-01	2.80E-01	2.80E-01	2.80E-01	2.80E-01	2.80E-01	2.80E-01	2.80E-01	2.80E-01	2.80E-01	2.80E-01
pu243	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09
pu244	5.73E-16	8.49E-16	1.13E-15	1.68E-15	2.79E-15	5.55E-15	8.32E-15	1.11E-14	1.39E-14	1.66E-14	2.22E-14
pu245	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu246	6.12E-17	6.12E-17	6.12E-17	6.12E-17	6.11E-17	6.10E-17	6.09E-17	6.07E-17	6.06E-17	6.05E-17	6.03E-17
am239	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am240	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am241	5.88E+02	7.64E+02	9.01E+02	1.09E+03	1.25E+03	1.26E+03	1.17E+03	1.08E+03	1.00E+03	9.26E+02	7.87E+02
am242m	4.31E+00	4.20E+00	4.10E+00	3.91E+00	3.54E+00	2.77E+00	2.16E+00	1.68E+00	1.32E+00	1.04E+00	6.33E-01
am242	4.29E+00	4.19E+00	4.08E+00	3.89E+00	3.52E+00	2.76E+00	2.16E+00	1.68E+00	1.32E+00	1.03E+00	6.31E-01
am243	2.01E+00	2.01E+00	2.01E+00	2.01E+00	2.00E+00	2.00E+00	1.99E+00	1.98E+00	1.97E+00	1.96E+00	1.94E+00
am244m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am244	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am245	1.36E-13	2.61E-15	4.99E-17	1.83E-20	2.46E-27	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am246	6.12E-17	6.12E-17	6.12E-17	6.12E-17	6.11E-17	6.10E-17	6.09E-17	6.07E-17	6.06E-17	6.05E-17	6.03E-17
cm241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay — actinides — page 46

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nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtihm for grams

	initial	15.0 yr	20.0 yr	30.0 yr	50.0 yr	100.0 yr	150.0 yr	200.0 yr	250.0 yr	300.0 yr	400.0 yr
cm242	3.55E+00	3.44E+00	3.38E+00	3.22E+00	2.91E+00	2.28E+00	1.78E+00	1.39E+00	1.09E+00	8.53E-01	5.21E-01
cm243	2.44E+00	2.16E+00	1.91E+00	1.50E+00	9.22E-01	2.73E-01	8.10E-02	2.40E-02	7.12E-03	2.11E-03	1.85E-04
cm244	8.38E+01	6.92E+01	5.71E+01	3.88E+01	1.81E+01	2.67E+00	3.93E-01	5.79E-02	8.54E-03	1.26E-03	2.73E-05
cm245	7.87E-03	7.86E-03	7.86E-03	7.85E-03	7.84E-03	7.81E-03	7.78E-03	7.74E-03	7.71E-03	7.68E-03	7.62E-03
cm246	9.20E-04	9.19E-04	9.19E-04	9.17E-04	9.15E-04	9.08E-04	9.01E-04	8.95E-04	8.88E-04	8.82E-04	8.69E-04
cm247	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09
cm248	6.98E-09	6.98E-09	6.98E-09	6.98E-09	6.98E-09	6.98E-09	6.98E-09	6.98E-09	6.98E-09	6.98E-09	6.98E-09
cm249	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm250	2.45E-16	2.45E-16	2.45E-16	2.45E-16	2.44E-16	2.44E-16	2.43E-16	2.43E-16	2.42E-16	2.42E-16	2.41E-16
cm251	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk249	9.39E-09	1.80E-10	3.44E-12	1.26E-15	1.69E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk250	7.16E-16	4.12E-17	3.43E-17	3.42E-17	3.42E-17	3.42E-17	3.41E-17	3.40E-17	3.39E-17	3.39E-17	3.37E-17
bk251	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf249	7.45E-08	7.38E-08	7.31E-08	7.16E-08	6.89E-08	6.24E-08	5.65E-08	5.12E-08	4.64E-08	4.20E-08	3.45E-08
cf250	1.12E-07	8.59E-08	6.59E-08	3.88E-08	1.34E-08	9.46E-10	6.71E-11	4.74E-12	3.35E-13	2.37E-14	1.52E-16
cf251	1.34E-09	1.34E-09	1.33E-09	1.32E-09	1.30E-09	1.25E-09	1.21E-09	1.16E-09	1.12E-09	1.07E-09	9.94E-10
cf252	9.84E-09	2.65E-09	7.16E-10	5.21E-11	2.75E-13	5.61E-19	1.14E-24	2.33E-30	.00E+00	.00E+00	.00E+00
cf253	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf254	4.75E-31	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es253	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254	6.81E-16	6.90E-18	7.00E-20	7.18E-24	6.85E-32	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
s250	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	2.73E+04	2.19E+04	1.77E+04	1.17E+04	5.69E+03	2.16E+03	1.69E+03	1.52E+03	1.40E+03	1.29E+03	1.13E+03

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Part B B&W 15x15, 3.00wt%, 20g-d/mtu decay fission products page 64

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

	initial	15.0 yr	20.0 yr	30.0 yr	50.0 yr	100.0 yr	150.0 yr	200.0 yr	250.0 yr	300.0 yr	400.0 yr
h 3	7.48E+01	5.65E+01	4.27E+01	2.43E+01	7.90E+00	4.75E-01	2.86E-02	1.72E-03	1.03E-04	6.21E-06	2.25E-08
li 6	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
li 7	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
be 9	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
be 10	8.26E-07	8.26E-07	8.26E-07	8.26E-07	8.26E-07	8.26E-07	8.26E-07	8.26E-07	8.26E-07	8.26E-07	8.26E-07
c 14	3.33E-05	3.32E-05	3.32E-05	3.32E-05	3.31E-05	3.29E-05	3.27E-05	3.25E-05	3.23E-05	3.21E-05	3.17E-05
ni 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 67	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 67	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 68	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 69	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 69m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 69	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 71m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 71m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20g-d/mtu decay fission products page 65

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

INFORMATION ONLY

	initial	15.0 yr	20.0 yr	30.0 yr	50.0 yr	100.0 yr	150.0 yr	200.0 yr	250.0 yr	300.0 yr	400.0 yr
zn 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 77m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 77m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 79	1.92E-01	1.92E-01	1.92E-01	1.92E-01	1.92E-01	1.92E-01	1.92E-01	1.92E-01	1.91E-01	1.91E-01	1.91E-01
se 79m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 79m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 80m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 81	1.48E-08	1.48E-08	1.48E-08	1.48E-08	1.48E-08	1.48E-08	1.48E-08	1.48E-08	1.48E-08	1.48E-08	1.48E-08
kr 81m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BSW 15x15, 3.00wt%, 20gwd/mtu decay — fission products — page 66

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nuclide radioactivity, curies
basis =per BSW assembly, 0.409 mtihm for grams

	initial	15.0 yr	20.0 yr	30.0 yr	50.0 yr	100.0 yr	150.0 yr	200.0 yr	250.0 yr	300.0 yr	400.0 yr
ge 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

as 82m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 82m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 83m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 85	1.37E+03	9.90E+02	7.17E+02	3.75E+02	1.08E+02	4.06E+00	1.60E-01	6.31E-03	2.49E-04	9.83E-06	1.53E-08
kr 85m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 86m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 87	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06
sr 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 87m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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nuclide radioactivity, curies
basis =per BW assembly, 0.409 mtm for grams

	initial	15.0 yr	20.0 yr	30.0 yr	50.0 yr	100.0 yr	150.0 yr	200.0 yr	250.0 yr	300.0 yr	400.0 yr
br 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

se 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 89	3.38E-17	4.51E-28	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89m	3.15E-21	4.56E-32	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 90	1.79E+04	1.59E+04	1.40E+04	1.10E+04	6.70E+03	1.98E+03	5.71E+02	1.67E+02	4.86E+01	1.42E+01	1.21E+00
y 90	1.79E+04	1.59E+04	1.40E+04	1.10E+04	6.70E+03	1.98E+03	5.71E+02	1.67E+02	4.86E+01	1.42E+01	1.21E+00
y 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91	3.95E-14	1.60E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	1.53E-09	1.52E-09	1.51E-09	1.50E-09	1.47E-09	1.39E-09	1.32E-09	1.26E-09	1.20E-09	1.14E-09	1.08E-09
se 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 92	3.66E-12	3.66E-12	3.66E-12	3.66E-12	3.66E-12	3.66E-12	3.66E-12	3.66E-12	3.66E-12	3.66E-12	3.66E-12
se 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 93	3.49E-01	3.49E-01	3.49E-01	3.49E-01	3.49E-01	3.49E-01	3.49E-01	3.49E-01	3.49E-01	3.49E-01	3.49E-01
rb 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 93m	1.39E-01	1.80E-01	2.12E-01	2.60E-01	3.11E-01	3.45E-01	3.48E-01	3.49E-01	3.49E-01	3.49E-01	3.49E-01
br 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay — fission products — page 68

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nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtms for grams

	initial	15.0 yr	20.0 yr	30.0 yr	50.0 yr	100.0 yr	150.0 yr	200.0 yr	250.0 yr	300.0 yr	400.0 yr
sr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 94	2.34E-05	2.34E-05	2.34E-05	2.34E-05	2.34E-05	2.33E-05	2.33E-05	2.32E-05	2.32E-05	2.32E-05	2.31E-05
rb 94m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

sr 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 95	2.21E-12	5.69E-21	1.47E-29	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 95	4.86E-12	1.25E-20	3.23E-29	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 95m	2.59E-14	6.69E-23	1.60E-31	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 97m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 98m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc 98	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.19E-06
nb 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 99m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc 99	3.95E+00	3.95E+00	3.95E+00	3.94E+00	3.94E+00	3.94E+00	3.94E+00	3.94E+00	3.94E+00	3.94E+00	3.94E+00
tc 99m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 69

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtms for grams

	initial	15.0 yr	20.0 yr	30.0 yr	50.0 yr	100.0 yr	150.0 yr	200.0 yr	250.0 yr	300.0 yr	400.0 yr
zr100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb100m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

mo101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh102	2.40E-02	7.28E-03	2.20E-03	2.02E-04	1.69E-06	1.09E-11	7.04E-17	4.54E-22	2.93E-27	2.28E-32	.00E+00
pd102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru103	2.93E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103m	2.93E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gcd/mtu decay fission products page 70

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtihm for grams

	initial	15.0 yr	20.0 yr	30.0 yr	50.0 yr	100.0 yr	150.0 yr	200.0 yr	250.0 yr	300.0 yr	400.0 yr
y106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru106	1.23E+02	4.07E+00	1.35E-01	1.48E-04	1.79E-10	2.89E-25	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106	1.23E+02	4.07E+00	1.35E-01	1.48E-04	1.79E-10	2.89E-25	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

tc107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd107	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02
pd107m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag108	9.05E-05	8.80E-05	8.57E-05	8.11E-05	7.27E-05	5.54E-05	4.21E-05	3.21E-05	2.44E-05	1.88E-05	1.08E-05
ag108m	1.04E-03	1.01E-03	9.85E-04	9.32E-04	8.36E-04	6.36E-04	4.84E-04	3.69E-04	2.81E-04	2.14E-04	1.24E-04
cd108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109m	3.57E-07	2.31E-08	1.50E-09	6.30E-12	1.11E-16	1.45E-28	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd109	3.57E-07	2.31E-08	1.50E-09	6.30E-12	1.11E-16	1.45E-28	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag110	2.68E-04	1.67E-06	1.08E-08	4.15E-13	6.51E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag110m	1.95E-02	1.23E-04	7.72E-07	3.03E-11	4.79E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay — fission products — page 71

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nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

	initial	15.0 yr	20.0 yr	30.0 yr	50.0 yr	100.0 yr	150.0 yr	200.0 yr	250.0 yr	300.0 yr	400.0 yr
cd110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

pd112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd113	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14
cd113m	3.86E+00	3.01E+00	2.36E+00	1.44E+00	5.39E-01	4.61E-02	3.95E-03	3.38E-04	2.90E-05	2.48E-06	1.82E-08
in113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in113m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114	1.28E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114m	1.34E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115m	1.49E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in115	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12
in115m	1.64E-27	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay — fission products — page 72

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nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtihm for grams

	initial	15.0 yr	20.0 yr	30.0 yr	50.0 yr	100.0 yr	150.0 yr	200.0 yr	250.0 yr	300.0 yr	400.0 yr
sn115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

in117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn119m	1.52E-03	2.08E-05	2.66E-07	4.75E-11	1.49E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BBW 15x15, 3.00wt%, 20gwd/mtu decay fission products page 73

0 nuclide radioactivity, curies
basis =per BBW assembly, 0.409 atms for grams

	initial	15.0 yr	20.0 yr	30.0 yr	50.0 yr	100.0 yr	150.0 yr	200.0 yr	250.0 yr	300.0 yr	400.0 yr
pd121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn121	3.98E-01	3.72E-01	3.44E-01	3.08E-01	2.39E-01	1.27E-01	6.78E-02	3.61E-02	1.98E-02	1.08E-02	2.90E-03
sn121m	5.10E-01	4.79E-01	4.46E-01	3.98E-01	3.08E-01	1.64E-01	8.74E-02	4.66E-02	2.48E-02	1.32E-02	3.74E-03
sb121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb122m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

in123m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123	3.96E-07	2.19E-11	1.21E-15	3.73E-24	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te123	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14
te123m	3.96E-10	1.01E-14	2.57E-19	1.67E-28	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb124	5.14E-17	3.78E-26	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb124m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb125	1.54E+02	4.31E+01	1.21E+01	9.56E-01	5.98E-03	1.82E-08	5.59E-14	1.71E-19	5.24E-25	1.60E-30	.00E+00
te125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te125m	3.79E+01	1.05E+01	2.96E+00	2.34E-01	1.45E-03	4.45E-09	1.36E-14	4.18E-20	1.28E-25	3.88E-31	.00E+00
pd126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn126	1.39E-01	1.39E-01	1.39E-01	1.39E-01	1.39E-01	1.39E-01	1.39E-01	1.39E-01	1.38E-01	1.38E-01	1.38E-01

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Part B BBW 15x15, 3.00wt%, 20gcd/mtu decay fission products page 74

0

nuclide radioactivity, curies
basis =per BBW assembly, 0.409 mtm for grams

	initial	15.0 yr	20.0 yr	30.0 yr	50.0 yr	100.0 yr	150.0 yr	200.0 yr	250.0 yr	300.0 yr	400.0 yr
sb126	1.94E-02	1.94E-02	1.94E-02	1.94E-02	1.94E-02	1.94E-02	1.94E-02	1.94E-02	1.94E-02	1.94E-02	1.94E-02
sb126m	1.39E-01	1.39E-01	1.39E-01	1.39E-01	1.39E-01	1.39E-01	1.39E-01	1.39E-01	1.38E-01	1.38E-01	1.38E-01
te126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127	2.30E-07	2.08E-12	1.88E-17	1.54E-27	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127m	2.35E-07	2.12E-12	1.92E-17	1.57E-27	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

sn129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129	1.43E-29	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129m	2.23E-29	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i129	8.82E-03	8.82E-03	8.82E-03	8.82E-03	8.82E-03	8.82E-03	8.82E-03	8.82E-03	8.82E-03	8.82E-03	8.82E-03
xe129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe129m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BBA 15x15, 3.00wt%, 20gwd/mtu decay fission products page 75

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nuclide radioactivity, curies
basis =per BBA assembly, 0.409 mtm for grams

	initial	15.0 yr	20.0 yr	30.0 yr	50.0 yr	100.0 yr	150.0 yr	200.0 yr	250.0 yr	300.0 yr	400.0 yr
cd132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba133	3.33E-06	2.40E-06	1.73E-06	8.93E-07	2.39E-07	8.86E-09	3.29E-10	1.22E-11	4.52E-13	1.68E-14	2.31E-17
in134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

xe134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134	9.34E+02	1.74E+02	3.24E+01	1.12E+00	1.39E-03	6.78E-11	3.39E-18	1.70E-25	.00E+00	.00E+00	.00E+00
cs134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs135	2.04E-01	2.04E-01	2.04E-01	2.04E-01	2.04E-01	2.04E-01	2.04E-01	2.04E-01	2.04E-01	2.04E-01	2.04E-01
cs135m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba136m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 76

0 nuclide radioactivity, curies

basis per B&W assembly, 0.409 mtihm for grams

	initial	15.0 yr	20.0 yr	30.0 yr	50.0 yr	100.0 yr	150.0 yr	200.0 yr	250.0 yr	300.0 yr	400.0 yr
sb137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs137	2.39E+04	2.13E+04	1.90E+04	1.50E+04	9.48E+03	2.99E+03	9.46E+02	2.98E+02	9.33E+01	2.94E+01	2.91E+00
ba137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba137m	2.26E+04	2.01E+04	1.79E+04	1.42E+04	8.95E+03	2.82E+03	8.88E+02	2.80E+02	8.81E+01	2.77E+01	2.75E+00
sb138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la138	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11
sb139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce139	2.17E-10	2.19E-14	2.22E-18	2.27E-26	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

te141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce141	4.74E-29	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce142	7.78E-06	7.78E-06	7.78E-06	7.78E-06	7.78E-06	7.78E-06	7.78E-06	7.78E-06	7.78E-06	7.78E-06	7.78E-06
pr142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr142m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BW 15x15, 3.00wt%, 20gwd/mtu decay fission products page 77

0 nuclide radioactivity, curies

basis =per BW assembly, 0.409 mtm for grams

	initial	15.0 yr	20.0 yr	30.0 yr	50.0 yr	100.0 yr	150.0 yr	200.0 yr	250.0 yr	300.0 yr	400.0 yr
xe143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce144	3.77E+01	4.44E-01	5.22E-03	7.22E-07	1.38E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144	3.77E+01	4.44E-01	5.22E-03	7.22E-07	1.38E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144m	5.28E-01	6.21E-03	7.31E-05	1.01E-08	1.94E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd144	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10
i145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm145	1.67E-02	1.37E-02	1.13E-02	7.63E-03	3.48E-03	4.92E-04	6.94E-05	9.80E-06	1.38E-06	1.95E-07	3.89E-09
sm145	1.44E-04	3.47E-06	8.39E-08	4.90E-11	1.67E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm146	2.37E-01	1.26E-01	6.78E-02	1.95E-02	1.57E-03	2.98E-06	5.66E-09	1.07E-11	2.03E-14	3.85E-17	1.38E-22
sm146	5.71E-03	5.91E-03	6.02E-03	6.11E-03	6.14E-03	6.14E-03	6.14E-03	6.14E-03	6.14E-03	6.14E-03	6.14E-03

xe147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm147	3.92E+03	1.06E+03	2.79E+02	1.99E+01	1.01E-01	1.84E-07	3.37E-13	6.17E-19	1.13E-24	2.05E-30	.00E+00
sm147	1.98E-06	2.08E-06	2.08E-06	2.08E-06	2.08E-06	2.08E-06	2.08E-06	2.08E-06	2.08E-06	2.08E-06	2.08E-06
cs148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148	1.00E-24	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148m	1.90E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gcd/mtu decay fission products page 78

0 nuclide radioactivity, curies

basis =per B&W assembly, 0.409 mtms for grams

	initial	15.0 yr	20.0 yr	30.0 yr	50.0 yr	100.0 yr	150.0 yr	200.0 yr	250.0 yr	300.0 yr	400.0 yr
sm148	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12
cs149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm149	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13
eu149	5.41E-19	6.68E-25	8.21E-31	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu150	1.18E-05	1.07E-05	9.69E-06	7.98E-06	5.42E-06	2.06E-06	7.82E-07	2.97E-07	1.13E-07	4.29E-08	6.18E-09
ba151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm151	1.51E+02	1.45E+02	1.40E+02	1.30E+02	1.11E+02	7.55E+01	5.14E+01	3.50E+01	2.38E+01	1.62E+01	7.49E+00
eu151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu152	2.78E+00	2.15E+00	1.66E+00	9.84E-01	3.48E-01	2.58E-02	1.92E-03	1.42E-04	1.06E-05	7.84E-07	4.32E-09
eu152m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd152	6.00E-13	6.22E-13	6.39E-13	6.62E-13	6.84E-13	6.95E-13	6.95E-13	6.95E-13	6.95E-13	6.95E-13	6.95E-13

INFORMATION ONLY

la153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd153	7.05E-05	3.74E-07	1.98E-09	5.55E-14	4.36E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gd/mtu decay fission products page 79

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nuclide radioactivity, curies
basis per B&W assembly, 0.409 mtm for grams

	initial	15.0 yr	20.0 yr	30.0 yr	50.0 yr	100.0 yr	150.0 yr	200.0 yr	250.0 yr	300.0 yr	400.0 yr
sm154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu154	8.81E+02	5.88E+02	3.93E+02	1.75E+02	3.49E+01	6.18E-01	1.09E-02	1.93E-04	3.42E-06	6.06E-08	1.89E-11
gd154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu155	3.50E+02	1.67E+02	7.98E+01	1.81E+01	9.36E-01	5.69E-04	3.46E-07	2.10E-10	1.28E-13	7.77E-17	2.87E-23
gd155m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

sm160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb160	6.19E-14	1.54E-21	3.83E-29	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BBW 15x15, 3.00w%, 20gd/mtu decay fission products page 80

0 nuclide radioactivity, curies

basis =per BBW assembly, 0.409 mtm for grams

	initial	15.0 yr	20.0 yr	30.0 yr	50.0 yr	100.0 yr	150.0 yr	200.0 yr	250.0 yr	300.0 yr	400.0 yr
dy161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166m	4.25E-05	4.24E-05	4.22E-05	4.20E-05	4.15E-05	4.08E-05	3.99E-05	3.81E-05	3.70E-05	3.55E-05	3.35E-05
er166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er167	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er167m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170	1.62E-14	8.61E-19	4.56E-23	1.37E-31	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm171	2.01E-05	3.30E-06	5.44E-07	1.47E-08	1.08E-11	1.56E-19	2.26E-27	.00E+00	.00E+00	.00E+00	.00E+00
yb171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

er172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	9.05E+04	7.63E+04	6.66E+04	5.19E+04	3.21E+04	9.80E+03	3.08E+03	9.49E+02	3.08E+02	1.07E+02	2.09E+01

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Part B B&W 15x15, 3.00w%, 20g-cd/intu dcay actinides page 84

0 nuclide radioactivity, curies

basis =per B&W assembly, 0.409 mtihm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
he 4	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tl206	2.07E-10	3.35E-10	1.48E-09	5.34E-09	1.70E-08	3.12E-08	4.62E-08	6.13E-08	7.63E-08	9.11E-08	9.83E-08
tl207	1.19E-04	1.47E-04	2.99E-04	5.82E-04	1.14E-03	1.69E-03	2.22E-03	2.75E-03	3.28E-03	3.78E-03	4.01E-03
tl208	8.46E-05	3.14E-05	3.74E-07	1.58E-07	1.60E-07	1.62E-07	1.64E-07	1.66E-07	1.69E-07	1.71E-07	1.73E-07
tl209	9.43E-08	1.56E-07	7.77E-07	3.86E-06	1.75E-05	4.01E-05	7.00E-05	1.08E-04	1.47E-04	1.92E-04	2.14E-04
pb206	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb207	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb209	4.49E-06	7.42E-06	3.70E-05	1.84E-04	8.35E-04	1.91E-03	3.33E-03	5.08E-03	7.00E-03	9.15E-03	1.03E-02
pb210	1.57E-04	2.54E-04	1.12E-03	4.05E-03	1.29E-02	2.36E-02	3.50E-02	4.66E-02	5.78E-02	6.90E-02	7.45E-02
pb211	1.19E-04	1.48E-04	3.00E-04	5.84E-04	1.14E-03	1.69E-03	2.23E-03	2.75E-03	3.27E-03	3.77E-03	4.02E-03
pb212	2.35E-04	8.74E-05	1.04E-06	4.39E-07	4.44E-07	4.50E-07	4.56E-07	4.63E-07	4.70E-07	4.77E-07	4.81E-07
pb214	1.84E-04	2.88E-04	1.12E-03	4.05E-03	1.29E-02	2.36E-02	3.50E-02	4.66E-02	5.78E-02	6.90E-02	7.45E-02
bi208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi209	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210	1.57E-04	2.54E-04	1.12E-03	4.05E-03	1.29E-02	2.36E-02	3.50E-02	4.66E-02	5.78E-02	6.90E-02	7.45E-02
bi211	1.19E-04	1.48E-04	3.00E-04	5.84E-04	1.14E-03	1.69E-03	2.23E-03	2.75E-03	3.27E-03	3.77E-03	4.02E-03
bi212	2.35E-04	8.74E-05	1.04E-06	4.39E-07	4.44E-07	4.50E-07	4.56E-07	4.63E-07	4.70E-07	4.77E-07	4.81E-07
bi213	4.49E-06	7.42E-06	3.70E-05	1.84E-04	8.35E-04	1.91E-03	3.33E-03	5.08E-03	7.00E-03	9.15E-03	1.03E-02
bi214	1.84E-04	2.88E-04	1.12E-03	4.05E-03	1.29E-02	2.36E-02	3.50E-02	4.66E-02	5.78E-02	6.90E-02	7.45E-02
po210	1.57E-04	2.54E-04	1.12E-03	4.05E-03	1.29E-02	2.36E-02	3.50E-02	4.66E-02	5.78E-02	6.90E-02	7.45E-02
po211m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
po211	3.27E-07	4.06E-07	8.24E-07	1.61E-06	3.14E-06	4.66E-06	6.13E-06	7.57E-06	8.99E-06	1.04E-05	1.10E-05
po212	1.51E-04	5.60E-05	6.67E-07	2.81E-07	2.84E-07	2.88E-07	2.92E-07	2.96E-07	3.01E-07	3.03E-07	3.03E-07
po213	4.40E-06	7.27E-06	3.62E-05	1.80E-04	8.18E-04	1.87E-03	3.26E-03	4.97E-03	6.85E-03	8.96E-03	1.01E-02
po214	1.84E-04	2.88E-04	1.12E-03	4.05E-03	1.29E-02	2.36E-02	3.50E-02	4.66E-02	5.78E-02	6.90E-02	7.45E-02
po215	1.19E-04	1.48E-04	3.00E-04	5.84E-04	1.14E-03	1.69E-03	2.23E-03	2.75E-03	3.27E-03	3.77E-03	4.02E-03
po216	2.35E-04	8.74E-05	1.04E-06	4.39E-07	4.44E-07	4.50E-07	4.56E-07	4.63E-07	4.70E-07	4.77E-07	4.81E-07
po218	1.84E-04	2.88E-04	1.12E-03	4.05E-03	1.29E-02	2.37E-02	3.50E-02	4.66E-02	5.78E-02	6.90E-02	7.45E-02
at217	4.49E-06	7.42E-06	3.70E-05	1.84E-04	8.35E-04	1.91E-03	3.33E-03	5.08E-03	7.00E-03	9.15E-03	1.03E-02
rn218	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rn219	1.19E-04	1.48E-04	3.00E-04	5.84E-04	1.14E-03	1.69E-03	2.23E-03	2.75E-03	3.27E-03	3.77E-03	4.02E-03
rn220	2.35E-04	8.74E-05	1.04E-06	4.39E-07	4.44E-07	4.50E-07	4.56E-07	4.63E-07	4.70E-07	4.77E-07	4.81E-07
rn222	1.84E-04	2.88E-04	1.12E-03	4.05E-03	1.29E-02	2.37E-02	3.50E-02	4.66E-02	5.78E-02	6.90E-02	7.45E-02
fr221	4.49E-06	7.42E-06	3.70E-05	1.84E-04	8.35E-04	1.91E-03	3.33E-03	5.08E-03	7.00E-03	9.15E-03	1.03E-02
fr223	1.64E-06	2.04E-06	4.14E-06	8.08E-06	1.58E-05	2.33E-05	3.08E-05	3.80E-05	4.51E-05	5.20E-05	5.54E-05
ra222	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ra223	1.19E-04	1.48E-04	3.00E-04	5.84E-04	1.14E-03	1.69E-03	2.23E-03	2.75E-03	3.27E-03	3.77E-03	4.02E-03
ra224	2.35E-04	8.74E-05	1.04E-06	4.39E-07	4.44E-07	4.50E-07	4.56E-07	4.63E-07	4.70E-07	4.77E-07	4.81E-07
ra225	4.49E-06	7.42E-06	3.70E-05	1.84E-04	8.35E-04	1.91E-03	3.33E-03	5.08E-03	7.00E-03	9.15E-03	1.03E-02
ra226	1.84E-04	2.88E-04	1.12E-03	4.05E-03	1.29E-02	2.37E-02	3.50E-02	4.66E-02	5.78E-02	6.90E-02	7.45E-02
ra228	1.85E-09	2.29E-09	4.63E-09	9.45E-09	1.98E-08	3.04E-08	4.14E-08	5.32E-08	6.51E-08	7.73E-08	8.35E-08
ac225	4.49E-06	7.42E-06	3.70E-05	1.84E-04	8.35E-04	1.91E-03	3.33E-03	5.08E-03	7.00E-03	9.15E-03	1.03E-02
ac227	1.19E-04	1.48E-04	3.00E-04	5.84E-04	1.14E-03	1.69E-03	2.23E-03	2.75E-03	3.27E-03	3.77E-03	4.02E-03
ac228	1.85E-09	2.29E-09	4.63E-09	9.45E-09	1.98E-08	3.04E-08	4.14E-08	5.32E-08	6.51E-08	7.73E-08	8.35E-08
th226	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th227	1.17E-04	1.46E-04	2.96E-04	5.76E-04	1.13E-03	1.67E-03	2.20E-03	2.72E-03	3.22E-03	3.72E-03	3.96E-03
th228	2.35E-04	8.74E-05	1.04E-06	4.39E-07	4.44E-07	4.50E-07	4.56E-07	4.63E-07	4.70E-07	4.77E-07	4.81E-07
th229	4.49E-06	7.42E-06	3.70E-05	1.84E-04	8.35E-04	1.91E-03	3.33E-03	5.08E-03	7.00E-03	9.15E-03	1.03E-02

INFORMATION ONLY

th230	2.33E-03	2.96E-03	6.09E-03	1.23E-02	2.46E-02	3.66E-02	4.83E-02	5.97E-02	7.09E-02	8.18E-02	8.71E-02
th231	1.37E-02	1.37E-02	1.38E-02	1.39E-02	1.42E-02	1.45E-02	1.48E-02	1.50E-02	1.53E-02	1.55E-02	1.56E-02

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay actinides page 85

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
th232	1.83E-09	2.29E-09	4.63E-09	9.45E-09	1.96E-08	3.04E-08	4.16E-08	5.32E-08	6.51E-08	7.73E-08	8.35E-08
th233	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th234	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
pa231	1.28E-04	1.57E-04	3.00E-04	5.84E-04	1.14E-03	1.69E-03	2.23E-03	2.75E-03	3.27E-03	3.77E-03	4.01E-03
pa232	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pa233	2.24E-01	2.47E-01	3.22E-01	3.71E-01	3.82E-01	3.82E-01	3.82E-01	3.82E-01	3.82E-01	3.81E-01	3.81E-01
pa234m	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
pa234	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04
pa235	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u230	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u231	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u232	2.29E-04	8.50E-05	1.02E-06	4.30E-07	4.24E-07	4.19E-07	4.14E-07	4.09E-07	4.04E-07	4.00E-07	3.97E-07
u233	2.88E-04	3.91E-04	1.02E-03	2.55E-03	5.81E-03	9.08E-03	1.23E-02	1.55E-02	1.87E-02	2.18E-02	2.34E-02
u234	6.80E-01	6.84E-01	6.88E-01	6.86E-01	6.83E-01	6.80E-01	6.77E-01	6.74E-01	6.71E-01	6.68E-01	6.67E-01
u235	1.37E-02	1.37E-02	1.38E-02	1.39E-02	1.42E-02	1.45E-02	1.48E-02	1.50E-02	1.53E-02	1.55E-02	1.56E-02
u236	9.32E-02	9.36E-02	9.57E-02	9.98E-02	1.06E-01	1.12E-01	1.16E-01	1.19E-01	1.22E-01	1.24E-01	1.25E-01
u237	1.86E-07	1.81E-07	1.74E-07	1.60E-07	1.36E-07	1.16E-07	9.81E-08	8.34E-08	7.08E-08	6.02E-08	5.54E-08
u238	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
u239	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u240	2.21E-14	2.76E-14	5.53E-14	1.10E-13	2.20E-13	3.30E-13	4.39E-13	5.47E-13	6.55E-13	7.63E-13	8.17E-13
u241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np235	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236	4.88E-06	4.88E-06	4.88E-06	4.88E-06	4.77E-06	4.71E-06	4.66E-06	4.60E-06	4.54E-06	4.49E-06	4.46E-06
np237	2.24E-01	2.47E-01	3.22E-01	3.71E-01	3.82E-01	3.82E-01	3.82E-01	3.82E-01	3.82E-01	3.81E-01	3.81E-01
np238	2.88E-03	1.74E-03	1.49E-04	1.09E-06	5.88E-11	3.16E-15	1.70E-19	9.11E-24	4.88E-28	2.28E-32	.00E+00
np239	1.94E+00	1.92E+00	1.83E+00	1.67E+00	1.38E+00	1.15E+00	9.49E-01	7.86E-01	6.52E-01	5.40E-01	4.91E-01
np240m	2.21E-14	2.76E-14	5.53E-14	1.10E-13	2.20E-13	3.30E-13	4.39E-13	5.47E-13	6.55E-13	7.63E-13	8.17E-13
np240	2.66E-17	3.32E-17	6.63E-17	1.32E-16	2.64E-16	3.96E-16	5.26E-16	6.57E-16	7.86E-16	9.16E-16	9.80E-16
np241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu236	4.34E-07	4.33E-07	4.32E-07	4.30E-07	4.24E-07	4.19E-07	4.14E-07	4.09E-07	4.04E-07	4.00E-07	3.97E-07
pu237	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu238	2.31E+01	1.07E+01	2.62E-01	2.98E-04	2.87E-08	1.54E-12	8.28E-17	4.45E-21	2.39E-25	1.28E-29	4.56E-32
pu239	1.62E+02	1.61E+02	1.59E+02	1.54E+02	1.46E+02	1.38E+02	1.30E+02	1.23E+02	1.16E+02	1.10E+02	1.08E+02
pu240	1.47E+02	1.45E+02	1.38E+02	1.24E+02	1.00E+02	8.11E+01	6.57E+01	5.32E+01	4.31E+01	3.49E+01	3.14E+01
pu241	7.80E-03	7.57E-03	7.27E-03	6.70E-03	5.69E-03	4.85E-03	4.11E-03	3.49E-03	2.98E-03	2.52E-03	2.32E-03
pu242	2.80E-01	2.80E-01	2.80E-01	2.79E-01	2.78E-01	2.77E-01	2.76E-01	2.75E-01	2.74E-01	2.73E-01	2.73E-01
pu243	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09
pu244	2.22E-14	2.77E-14	5.53E-14	1.11E-13	2.21E-13	3.30E-13	4.39E-13	5.48E-13	6.56E-13	7.64E-13	8.18E-13
pu245	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu246	6.03E-17	6.00E-17	5.88E-17	5.65E-17	5.22E-17	4.82E-17	4.45E-17	4.11E-17	3.80E-17	3.51E-17	3.37E-17
am239	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am240	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am241	7.87E+02	6.71E+02	3.01E+02	6.06E+01	2.46E+00	1.05E-01	8.33E-03	3.80E-03	3.10E-03	2.63E-03	2.42E-03
am242m	6.33E-01	3.87E-01	3.32E-02	2.43E-04	1.31E-08	7.01E-13	3.77E-17	2.02E-21	1.09E-25	5.84E-30	4.56E-32
am242	6.31E-01	3.86E-01	3.30E-02	2.42E-04	1.30E-08	6.98E-13	3.75E-17	2.01E-21	1.08E-25	5.82E-30	4.56E-32
am243	1.94E+00	1.92E+00	1.83E+00	1.67E+00	1.38E+00	1.15E+00	9.49E-01	7.86E-01	6.52E-01	5.40E-01	4.91E-01
am244m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am244	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am245	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am246	6.03E-17	6.00E-17	5.88E-17	5.65E-17	5.22E-17	4.82E-17	4.45E-17	4.11E-17	3.80E-17	3.51E-17	3.37E-17
cm241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay actinides page 86

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtihm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
cm242	5.21E-01	3.19E-01	2.73E-02	2.00E-04	1.08E-08	5.79E-13	3.11E-17	1.67E-21	8.98E-26	4.81E-30	4.56E-32
cm243	1.85E-04	1.63E-05	8.51E-11	2.33E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm244	2.73E-05	5.93E-07	2.86E-15	6.85E-32	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm245	7.62E-03	7.56E-03	7.26E-03	6.69E-03	5.68E-03	4.83E-03	4.10E-03	3.48E-03	2.96E-03	2.51E-03	2.32E-03
cm246	8.69E-04	8.56E-04	7.96E-04	6.80E-04	5.13E-04	3.83E-04	2.85E-04	2.13E-04	1.59E-04	1.18E-04	1.02E-04
cm247	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09
cm248	6.96E-09	6.96E-09	6.95E-09	6.94E-09	6.91E-09	6.88E-09	6.85E-09	6.82E-09	6.80E-09	6.77E-09	6.75E-09
cm249	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm250	2.41E-16	2.40E-16	2.35E-16	2.26E-16	2.09E-16	1.93E-16	1.78E-16	1.64E-16	1.52E-16	1.40E-16	1.35E-16
cm251	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk249	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk250	3.37E-17	3.36E-17	3.29E-17	3.17E-17	2.92E-17	2.70E-17	2.49E-17	2.30E-17	2.13E-17	1.96E-17	1.88E-17
bk251	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf249	3.45E-08	2.83E-08	1.05E-08	1.46E-09	2.79E-11	5.33E-13	1.02E-14	1.95E-16	3.74E-18	7.16E-20	9.91E-21
cf250	1.52E-16	3.42E-17	3.29E-17	3.17E-17	2.93E-17	2.70E-17	2.49E-17	2.30E-17	2.13E-17	1.96E-17	1.89E-17
cf251	9.94E-10	9.20E-10	6.26E-10	2.85E-10	6.17E-11	1.32E-11	2.82E-12	6.01E-13	1.28E-13	2.74E-14	1.27E-14
cf252	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf253	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf254	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es253	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
s250	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	1.13E+03	9.95E+02	6.04E+02	3.44E+02	2.54E+02	2.24E+02	2.00E+02	1.80E+02	1.63E+02	1.49E+02	1.42E+02

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 104

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtihm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
h 3	2.25E-08	8.13E-11	5.03E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
li 6	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
li 7	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
be 9	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
be 10	8.26E-07	8.26E-07	8.25E-07	8.25E-07	8.24E-07	8.24E-07	8.23E-07	8.22E-07	8.21E-07	8.21E-07	8.20E-07
c 14	3.17E-05	3.13E-05	2.95E-05	2.61E-05	2.05E-05	1.61E-05	1.27E-05	9.93E-06	7.80E-06	6.12E-06	5.42E-06
ni 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 67	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 67	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 68	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 69	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 69m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 69	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 71m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 71m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

ni 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 105

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nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
zn 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 77m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 77m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 79	1.91E-01	1.90E-01	1.88E-01	1.84E-01	1.77E-01	1.70E-01	1.63E-01	1.56E-01	1.50E-01	1.43E-01	1.40E-01

se 79m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 79m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 80m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 81	1.48E-08	1.47E-08	1.47E-08	1.47E-08	1.46E-08	1.45E-08	1.44E-08	1.43E-08	1.42E-08	1.41E-08	1.41E-08	
kr 81m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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nuclide radioactivity, curies
basis =per BBW assembly, 0.409 mtm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
ga 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 82m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 82m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 83m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 85	1.53E-08	2.37E-11	2.14E-25	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

kr 85m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 86m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 87	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06
sr 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 87m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BW 15x15, 3.00wt%, 20g-cl/mtu decay fission products page 107

0 nuclide radioactivity, curies

basis =per BW assembly, 0.409 mtm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
br 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 90	1.21E+00	1.03E-01	4.63E-07	9.34E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 90	1.21E+00	1.03E-01	4.63E-07	9.34E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	1.03E-09	9.28E-10	5.56E-10	2.01E-10	2.61E-11	3.40E-12	4.43E-13	5.77E-14	7.51E-15	9.78E-16	3.53E-16
se 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

br 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 92	3.65E-12	3.65E-12	3.65E-12	3.65E-12	3.65E-12	3.65E-12	3.65E-12	3.65E-12	3.65E-12	3.65E-12	3.65E-12
se 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 93	3.49E-01	3.49E-01	3.49E-01	3.49E-01	3.48E-01	3.48E-01	3.48E-01	3.47E-01	3.47E-01	3.47E-01	3.47E-01
nb 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 93m	3.49E-01	3.49E-01	3.49E-01	3.49E-01	3.48E-01	3.48E-01	3.48E-01	3.47E-01	3.47E-01	3.47E-01	3.47E-01
br 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BBW 15x15, 3.00wt%, 20gwd/mtu decay fission products page 108

0

nuclide radioactivity, curies
basis =per BBW assembly, 0.409 mtm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
sr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 94	2.31E-05	2.30E-05	2.26E-05	2.19E-05	2.04E-05	1.91E-05	1.78E-05	1.66E-05	1.55E-05	1.45E-05	1.40E-05
nb 94m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 95m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 97m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

rb 98m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc 98	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.18E-06	1.18E-06	1.18E-06	1.18E-06	1.18E-06
rb 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 99m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc 99	3.94E+00	3.94E+00	3.93E+00	3.92E+00	3.89E+00	3.87E+00	3.84E+00	3.82E+00	3.79E+00	3.77E+00	3.76E+00	
tc 99m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 109

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
zr100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb100m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

ru104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 110

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nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
y106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd107	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02
pd107m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag108	1.08E-05	6.24E-06	4.07E-07	1.74E-09	3.15E-14	5.73E-19	1.04E-23	1.89E-28	.00E+00	.00E+00	.00E+00
ag108m	1.24E-04	7.17E-05	4.68E-06	2.00E-08	3.62E-13	6.58E-18	1.20E-22	2.17E-27	4.56E-32	.00E+00	.00E+00
cd108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

cd109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag110m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BBW 15x15, 3.00wt%, 20gcd/mtu decay fission products page 111

0 nuclide radioactivity, curies
basis =per BBW assembly, 0.409 mtihm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
cd110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd113	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14
cd113m	1.88E-08	1.33E-10	2.82E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in113m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

INFORMATION ONLY

pd115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00.	.00E+00
in115	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12
in115m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 112

0 nuclide radioactivity, curies

basis =per B&W assembly, 0.409 mtm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
sn115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn119m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

in120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 113

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
pd121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn121	2.90E-03	8.24E-04	1.51E-06	5.09E-12	5.77E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn121m	3.74E-03	1.06E-03	1.95E-06	6.56E-12	7.44E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb122m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te123	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14
te123m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb124m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te125m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

sn126	1.38E-01	1.38E-01	1.38E-01	1.37E-01	1.35E-01	1.33E-01	1.31E-01	1.29E-01	1.28E-01	1.26E-01	1.25E-01

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay — fission products — page 114

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
sb126	1.94E-02	1.94E-02	1.93E-02	1.92E-02	1.88E-02	1.86E-02	1.84E-02	1.81E-02	1.79E-02	1.78E-02	1.75E-02
sb126m	1.38E-01	1.38E-01	1.38E-01	1.37E-01	1.35E-01	1.33E-01	1.31E-01	1.29E-01	1.28E-01	1.26E-01	1.25E-01
te126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i129	8.82E-03	8.82E-03	8.82E-03	8.82E-03	8.82E-03	8.82E-03	8.82E-03	8.82E-03	8.82E-03	8.82E-03	8.81E-03
xe129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe129m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay — fission products — page 115

INFORMATION ONLY

0 nuclide radioactivity, curies
basis =per BBU assembly, 0.409 mtHm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
cd132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba133	2.31E-17	3.17E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs135	2.04E-01	2.04E-01	2.04E-01	2.04E-01	2.04E-01	2.04E-01	2.04E-01	2.03E-01	2.03E-01	2.03E-01	2.03E-01
cs135m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba136m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BBU 15x15, 3.00wt%, 20gcd/mtu decay fission products page 116

0 nuclide radioactivity, curies
basis =per BBU assembly, 0.409 mtHm for grams

initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr

INFORMATION ONLY

sb137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs137	2.91E+00	2.88E-01	2.77E-06	2.56E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba137m	2.75E+00	2.73E-01	2.62E-06	2.41E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la138	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11
sb139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce142	7.76E-06	7.76E-06	7.76E-06	7.76E-06	7.76E-06	7.76E-06	7.76E-06	7.76E-06	7.76E-06	7.76E-06	7.76E-06	7.76E-06
pr142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr142m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 117

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
xe143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

la143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd144	4.06E-10	4.06E-10	4.06E-10	4.06E-10	4.06E-10	4.06E-10	4.06E-10	4.06E-10	4.06E-10	4.06E-10	4.06E-10
i145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm145	3.88E-09	7.74E-11	2.43E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm146	1.38E-22	4.97E-28	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm146	6.14E-08	6.14E-08	6.14E-08	6.14E-08	6.14E-08	6.14E-08	6.14E-08	6.14E-08	6.14E-08	6.14E-08	6.14E-08
xe147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm147	2.06E-06	2.06E-06	2.06E-06	2.06E-06	2.06E-06	2.06E-06	2.06E-06	2.06E-06	2.06E-06	2.06E-06	2.06E-06
cs148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BW 15x15, 3.00wt%, 20gwd/mtu decay fission products page 118

0 nuclide radioactivity, curies
basis =per BW assembly, 0.409 atm for grass

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
sm148	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12
cs149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

nd149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm149	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13
eu149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu150	6.18E-09	8.92E-10	5.58E-14	2.18E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm151	7.49E+00	3.47E+00	7.37E-02	3.33E-05	6.79E-12	1.38E-18	2.82E-25	6.86E-32	.00E+00	.00E+00	.00E+00
eu151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu152	4.32E-09	2.38E-11	1.21E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu152m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd152	6.98E-13	6.98E-13	6.98E-13	6.98E-13	6.98E-13	6.98E-13	6.98E-13	6.98E-13	6.98E-13	6.98E-13	6.98E-13
la153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 119

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grass

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
sm154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu154	1.89E-11	5.93E-15	2.28E-32	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

eu155	2.87E-23	1.06E-29	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B 8&W 15x15; 3.00w/o, 20gwd/mtu decay fission products page 120

0 nuclide radioactivity, curies

basis =per 8&W assembly, 0.409 atm for gases

	Initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
dy161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

tb163m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166m	3.39E-05	3.20E-05	2.40E-05	1.39E-05	4.24E-06	1.33E-06	4.20E-07	1.32E-07	4.17E-08	1.31E-08	7.37E-09
er166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er167	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er167m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	2.09E+01	9.60E+00	5.43E+00	5.33E+00	5.30E+00	5.28E+00	5.22E+00	5.18E+00	5.15E+00	5.11E+00	5.10E+00

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Part B B&W 15x15, 3.00wt%, 20g-cl/mtu decay actinides page 124

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
he 4	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tl206	9.83E-08	1.05E-07	1.13E-07	1.20E-07	1.27E-07	1.33E-07	1.40E-07	1.47E-07	1.53E-07	1.60E-07	1.66E-07
tl207	4.01E-03	4.25E-03	4.49E-03	4.73E-03	4.96E-03	5.19E-03	5.42E-03	5.64E-03	5.87E-03	6.09E-03	6.30E-03
tl208	1.73E-07	1.74E-07	1.76E-07	1.77E-07	1.78E-07	1.80E-07	1.81E-07	1.83E-07	1.84E-07	1.86E-07	1.87E-07
tl209	2.16E-04	2.41E-04	2.66E-04	2.92E-04	3.18E-04	3.45E-04	3.72E-04	4.00E-04	4.28E-04	4.56E-04	4.85E-04
pb206	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb207	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb209	1.03E-02	1.15E-02	1.27E-02	1.39E-02	1.51E-02	1.64E-02	1.77E-02	1.90E-02	2.04E-02	2.17E-02	2.31E-02
pb210	7.45E-02	7.95E-02	8.53E-02	9.08E-02	9.59E-02	1.01E-01	1.06E-01	1.11E-01	1.16E-01	1.21E-01	1.26E-01
pb211	4.02E-03	4.26E-03	4.50E-03	4.74E-03	4.97E-03	5.20E-03	5.43E-03	5.66E-03	5.88E-03	6.10E-03	6.32E-03
pb212	4.81E-07	4.84E-07	4.88E-07	4.92E-07	4.96E-07	5.00E-07	5.04E-07	5.08E-07	5.13E-07	5.17E-07	5.21E-07
pb214	7.45E-02	7.95E-02	8.53E-02	9.08E-02	9.59E-02	1.01E-01	1.06E-01	1.11E-01	1.16E-01	1.21E-01	1.26E-01
bi208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi209	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

bi210	7.45E-02	7.99E-02	8.53E-02	9.06E-02	9.59E-02	1.01E-01	1.06E-01	1.11E-01	1.16E-01	1.21E-01	1.26E-01
bi211	4.02E-03	4.26E-03	4.50E-03	4.74E-03	4.97E-03	5.20E-03	5.43E-03	5.66E-03	5.88E-03	6.10E-03	6.32E-03
bi212	4.81E-07	4.84E-07	4.88E-07	4.92E-07	4.96E-07	5.00E-07	5.04E-07	5.08E-07	5.13E-07	5.17E-07	5.21E-07
bi213	1.03E-02	1.15E-02	1.27E-02	1.39E-02	1.51E-02	1.64E-02	1.77E-02	1.90E-02	2.04E-02	2.17E-02	2.31E-02
bi214	7.45E-02	7.99E-02	8.53E-02	9.06E-02	9.59E-02	1.01E-01	1.06E-01	1.11E-01	1.16E-01	1.21E-01	1.26E-01
po210	7.45E-02	7.99E-02	8.53E-02	9.06E-02	9.59E-02	1.01E-01	1.06E-01	1.11E-01	1.16E-01	1.21E-01	1.26E-01
po211m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
po211	1.10E-05	1.17E-05	1.24E-05	1.30E-05	1.37E-05	1.43E-05	1.49E-05	1.56E-05	1.62E-05	1.68E-05	1.74E-05
po212	3.08E-07	3.10E-07	3.13E-07	3.15E-07	3.18E-07	3.20E-07	3.23E-07	3.26E-07	3.28E-07	3.31E-07	3.34E-07
po213	1.01E-02	1.12E-02	1.24E-02	1.36E-02	1.48E-02	1.61E-02	1.74E-02	1.88E-02	1.99E-02	2.13E-02	2.26E-02
po214	7.45E-02	7.99E-02	8.53E-02	9.06E-02	9.59E-02	1.01E-01	1.06E-01	1.11E-01	1.16E-01	1.21E-01	1.26E-01
po215	4.02E-03	4.26E-03	4.50E-03	4.74E-03	4.97E-03	5.20E-03	5.43E-03	5.66E-03	5.88E-03	6.10E-03	6.32E-03
po216	4.81E-07	4.84E-07	4.88E-07	4.92E-07	4.96E-07	5.00E-07	5.04E-07	5.08E-07	5.13E-07	5.17E-07	5.21E-07
po218	7.45E-02	8.00E-02	8.53E-02	9.06E-02	9.59E-02	1.01E-01	1.06E-01	1.11E-01	1.16E-01	1.21E-01	1.26E-01
at217	1.03E-02	1.15E-02	1.27E-02	1.39E-02	1.51E-02	1.64E-02	1.77E-02	1.90E-02	2.04E-02	2.17E-02	2.31E-02
rn218	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rn219	4.02E-03	4.26E-03	4.50E-03	4.74E-03	4.97E-03	5.20E-03	5.43E-03	5.66E-03	5.88E-03	6.10E-03	6.32E-03
rn220	4.81E-07	4.84E-07	4.88E-07	4.92E-07	4.96E-07	5.00E-07	5.04E-07	5.08E-07	5.13E-07	5.17E-07	5.21E-07
rn222	7.45E-02	8.00E-02	8.53E-02	9.06E-02	9.59E-02	1.01E-01	1.06E-01	1.11E-01	1.16E-01	1.21E-01	1.26E-01
fr221	1.03E-02	1.15E-02	1.27E-02	1.39E-02	1.51E-02	1.64E-02	1.77E-02	1.90E-02	2.04E-02	2.17E-02	2.31E-02
fr223	5.54E-05	5.88E-05	6.21E-05	6.54E-05	6.86E-05	7.18E-05	7.50E-05	7.81E-05	8.12E-05	8.42E-05	8.72E-05
ra222	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ra223	4.02E-03	4.26E-03	4.50E-03	4.74E-03	4.97E-03	5.20E-03	5.43E-03	5.66E-03	5.88E-03	6.10E-03	6.32E-03
ra224	4.81E-07	4.84E-07	4.88E-07	4.92E-07	4.96E-07	5.00E-07	5.04E-07	5.08E-07	5.13E-07	5.17E-07	5.21E-07
ra225	1.03E-02	1.15E-02	1.27E-02	1.39E-02	1.51E-02	1.64E-02	1.77E-02	1.90E-02	2.04E-02	2.17E-02	2.31E-02
ra226	7.45E-02	8.00E-02	8.53E-02	9.06E-02	9.59E-02	1.01E-01	1.06E-01	1.11E-01	1.16E-01	1.21E-01	1.26E-01
ra228	8.35E-08	8.97E-08	9.59E-08	1.02E-07	1.02E-07	1.15E-07	1.21E-07	1.28E-07	1.34E-07	1.41E-07	1.47E-07
ac225	1.03E-02	1.15E-02	1.27E-02	1.39E-02	1.51E-02	1.64E-02	1.77E-02	1.90E-02	2.04E-02	2.17E-02	2.31E-02
ac227	4.02E-03	4.26E-03	4.50E-03	4.74E-03	4.97E-03	5.20E-03	5.43E-03	5.66E-03	5.88E-03	6.10E-03	6.32E-03
ac228	8.35E-08	8.97E-08	9.59E-08	1.02E-07	1.02E-07	1.15E-07	1.21E-07	1.28E-07	1.34E-07	1.41E-07	1.47E-07
th226	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th227	3.98E-03	4.20E-03	4.44E-03	4.67E-03	4.90E-03	5.13E-03	5.36E-03	5.58E-03	5.80E-03	6.02E-03	6.23E-03
th228	4.81E-07	4.84E-07	4.88E-07	4.92E-07	4.96E-07	5.00E-07	5.04E-07	5.08E-07	5.13E-07	5.17E-07	5.21E-07
th229	1.03E-02	1.15E-02	1.27E-02	1.39E-02	1.51E-02	1.64E-02	1.77E-02	1.90E-02	2.04E-02	2.17E-02	2.31E-02
th230	8.71E-02	9.24E-02	9.77E-02	1.03E-01	1.08E-01	1.13E-01	1.18E-01	1.23E-01	1.28E-01	1.33E-01	1.37E-01
th231	1.56E-02	1.57E-02	1.58E-02	1.59E-02	1.60E-02	1.61E-02	1.62E-02	1.63E-02	1.63E-02	1.64E-02	1.65E-02

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Part B B&W 15x15, 3.00wt%, 20gcd/mtu decay actinides page 125

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
th232	8.35E-08	8.97E-08	9.59E-08	1.02E-07	1.02E-07	1.15E-07	1.21E-07	1.28E-07	1.34E-07	1.41E-07	1.47E-07
th233	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th234	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
pa231	4.01E-03	4.26E-03	4.50E-03	4.74E-03	4.97E-03	5.20E-03	5.43E-03	5.66E-03	5.88E-03	6.10E-03	6.32E-03
pa232	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pa233	3.81E-01	3.81E-01	3.81E-01	3.81E-01	3.81E-01	3.81E-01	3.80E-01	3.80E-01	3.80E-01	3.80E-01	3.80E-01
pa234m	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
pa234	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04
pa235	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u230	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u231	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u232	3.97E-07	3.95E-07	3.92E-07	3.90E-07	3.88E-07	3.85E-07	3.83E-07	3.81E-07	3.79E-07	3.78E-07	3.74E-07
u233	2.34E-02	2.50E-02	2.66E-02	2.80E-02	2.96E-02	3.11E-02	3.26E-02	3.41E-02	3.56E-02	3.71E-02	3.86E-02
u234	6.67E-01	6.65E-01	6.64E-01	6.62E-01	6.61E-01	6.60E-01	6.58E-01	6.57E-01	6.55E-01	6.54E-01	6.52E-01
u235	1.56E-02	1.57E-02	1.58E-02	1.59E-02	1.60E-02	1.61E-02	1.62E-02	1.63E-02	1.63E-02	1.64E-02	1.65E-02
u236	1.25E-01	1.26E-01	1.27E-01	1.28E-01	1.28E-01	1.29E-01	1.30E-01	1.30E-01	1.30E-01	1.31E-01	1.31E-01
u237	5.54E-08	5.11E-08	4.71E-08	4.34E-08	4.00E-08	3.69E-08	3.40E-08	3.13E-08	2.88E-08	2.66E-08	2.45E-08
u238	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
u239	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

u240	8.17E-13	8.70E-13	9.24E-13	9.77E-13	1.03E-12	1.08E-12	1.14E-12	1.19E-12	1.24E-12	1.29E-12	1.35E-12
u241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np235	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236	4.46E-06	4.44E-06	4.41E-06	4.38E-06	4.36E-06	4.33E-06	4.30E-06	4.28E-06	4.25E-06	4.23E-06	4.20E-06
np237	3.81E-01	3.81E-01	3.81E-01	3.81E-01	3.81E-01	3.81E-01	3.80E-01	3.80E-01	3.80E-01	3.80E-01	3.80E-01
np238	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np239	4.91E-01	4.47E-01	4.07E-01	3.71E-01	3.37E-01	3.07E-01	2.79E-01	2.54E-01	2.32E-01	2.11E-01	1.92E-01
np240m	8.17E-13	8.70E-13	9.24E-13	9.77E-13	1.03E-12	1.08E-12	1.14E-12	1.19E-12	1.24E-12	1.29E-12	1.35E-12
np240	9.80E-16	1.04E-15	1.11E-15	1.17E-15	1.24E-15	1.30E-15	1.36E-15	1.43E-15	1.49E-15	1.55E-15	1.62E-15
np241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu236	3.97E-07	3.95E-07	3.92E-07	3.90E-07	3.88E-07	3.86E-07	3.83E-07	3.81E-07	3.78E-07	3.76E-07	3.74E-07
pu237	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu238	4.56E-32	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu239	1.06E+02	1.03E+02	1.01E+02	9.77E+01	9.50E+01	9.23E+01	8.97E+01	8.71E+01	8.47E+01	8.23E+01	8.00E+01
pu240	3.14E+01	2.82E+01	2.54E+01	2.28E+01	2.06E+01	1.85E+01	1.66E+01	1.50E+01	1.35E+01	1.21E+01	1.09E+01
pu241	2.32E-03	2.14E-03	1.97E-03	1.82E-03	1.67E-03	1.54E-03	1.42E-03	1.31E-03	1.21E-03	1.11E-03	1.03E-03
pu242	2.73E-01	2.72E-01	2.72E-01	2.71E-01	2.71E-01	2.70E-01	2.70E-01	2.69E-01	2.69E-01	2.68E-01	2.68E-01
pu243	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09
pu244	8.18E-13	8.71E-13	9.25E-13	9.78E-13	1.03E-12	1.08E-12	1.14E-12	1.19E-12	1.24E-12	1.30E-12	1.35E-12
pu245	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu246	3.37E-17	3.24E-17	3.11E-17	2.99E-17	2.87E-17	2.76E-17	2.65E-17	2.55E-17	2.45E-17	2.35E-17	2.26E-17
am239	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am240	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am241	2.42E-03	2.25E-03	2.08E-03	1.89E-03	1.74E-03	1.61E-03	1.48E-03	1.36E-03	1.26E-03	1.16E-03	1.07E-03
am242m	4.56E-32	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am242	4.56E-32	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am243	4.91E-01	4.47E-01	4.07E-01	3.71E-01	3.37E-01	3.07E-01	2.79E-01	2.54E-01	2.32E-01	2.11E-01	1.92E-01
am244m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am244	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am245	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am246	3.37E-17	3.24E-17	3.11E-17	2.99E-17	2.87E-17	2.76E-17	2.65E-17	2.55E-17	2.45E-17	2.35E-17	2.26E-17
cm241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BBU 15x15, 3.00wt%, 20gwd/mtu decay actinides page 126

0 nuclide radioactivity, curies
basis =per BBU assembly, 0.409 mtm for grams

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
cm242	4.56E-32	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm243	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm244	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm245	2.32E-03	2.13E-03	1.97E-03	1.81E-03	1.67E-03	1.54E-03	1.42E-03	1.31E-03	1.21E-03	1.11E-03	1.02E-03
cm246	1.03E-04	8.84E-05	7.63E-05	6.59E-05	5.69E-05	4.92E-05	4.25E-05	3.67E-05	3.17E-05	2.74E-05	2.36E-05
cm247	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09
cm248	6.75E-09	6.74E-09	6.73E-09	6.71E-09	6.70E-09	6.69E-09	6.67E-09	6.66E-09	6.65E-09	6.63E-09	6.62E-09
cm249	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm250	1.35E-16	1.25E-16	1.24E-16	1.20E-16	1.15E-16	1.10E-16	1.06E-16	1.02E-16	9.80E-17	9.41E-17	9.05E-17
cm251	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk249	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk250	1.85E-17	1.81E-17	1.74E-17	1.67E-17	1.61E-17	1.55E-17	1.49E-17	1.43E-17	1.37E-17	1.32E-17	1.27E-17
bk251	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf249	9.91E-21	1.37E-21	1.90E-22	2.62E-23	3.63E-24	5.02E-25	6.95E-26	9.61E-27	1.33E-27	1.84E-28	2.55E-29
cf250	1.85E-17	1.81E-17	1.74E-17	1.67E-17	1.61E-17	1.55E-17	1.49E-17	1.43E-17	1.37E-17	1.32E-17	1.27E-17
cf251	1.27E-14	5.86E-15	2.71E-15	1.25E-15	5.78E-16	2.67E-16	1.23E-16	5.71E-17	2.64E-17	1.22E-17	5.63E-18
cf252	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf253	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf254	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es253	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

es254	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
s250	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	1.42E+02	1.36E+02	1.30E+02	1.25E+02	1.20E+02	1.15E+02	1.10E+02	1.06E+02	1.02E+02	9.86E+01	9.51E+01

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 144

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nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
h 3	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
li 6	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
li 7	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
be 9	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
be 10	8.20E-07	8.20E-07	8.20E-07	8.19E-07	8.19E-07	8.19E-07	8.18E-07	8.18E-07	8.18E-07	8.17E-07	8.17E-07
c 14	5.42E-06	4.81E-06	4.26E-06	3.77E-06	3.34E-06	2.96E-06	2.62E-06	2.33E-06	2.06E-06	1.83E-06	1.62E-06
ni 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 67	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 67	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 68	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 69	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 69m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 69	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 71m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 71m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

	as 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
	ni 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
	cu 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BBW 15x15, 3.00wt%, 20gd/mtu decay fission products page 145

0 nuclide radioactivity, curies
basis =per BBW assembly, 0.409 mtm for grams

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
zn 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 77m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 77m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 79	1.40E-01	1.37E-01	1.35E-01	1.32E-01	1.29E-01	1.26E-01	1.24E-01	1.21E-01	1.19E-01	1.16E-01	1.14E-01
se 79m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 79m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 80m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 81	1.41E-08	1.40E-08	1.40E-08	1.39E-08	1.39E-08	1.38E-08	1.38E-08	1.38E-08	1.37E-08	1.37E-08	1.36E-08
kr 81m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BBW 15x15, 3.00wt%, 20gwd/mtu decay fission products page 146

0 nuclide radioactivity, curies

basis =per BBW assembly, 0.409 mtm for grams

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
ge 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 83m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 82m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 83m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 85m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 86m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 87	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06
sr 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 87m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BBW 15x15, 3.00wt%, 20gwd/mtu decay fission products page 147

0 nuclide radioactivity, curies

INFORMATION ONLY

basis =per B&W assembly, 0.409 mtm for grams

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
br 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	3.53E-16	1.27E-16	4.55E-17	1.66E-17	5.98E-18	2.16E-18	7.78E-19	2.81E-19	1.01E-19	3.66E-20	1.32E-20
se 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 92	3.65E-12	3.65E-12	3.65E-12	3.65E-12	3.65E-12	3.65E-12	3.65E-12	3.65E-12	3.65E-12	3.65E-12	3.65E-12
se 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 93	3.47E-01	3.46E-01	3.46E-01	3.46E-01	3.46E-01	3.46E-01	3.46E-01	3.46E-01	3.45E-01	3.45E-01	3.45E-01
rb 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 93m	3.47E-01	3.46E-01	3.46E-01	3.46E-01	3.46E-01	3.46E-01	3.46E-01	3.46E-01	3.45E-01	3.45E-01	3.45E-01
br 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 148

0 nuclide radioactivity, curies

basis =per B&W assembly, 0.409 mtm for grams

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

y 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 94	1.40E-05	1.36E-05	1.31E-05	1.27E-05	1.22E-05	1.18E-05	1.14E-05	1.10E-05	1.07E-05	1.03E-05	9.97E-06
nb 94m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 95m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 97m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 98a	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc 98	1.18E-06	1.18E-06	1.18E-06	1.18E-06	1.18E-06	1.18E-06	1.18E-06	1.18E-06	1.18E-06	1.18E-06	1.18E-06
rb 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 99m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc 99	3.76E+00	3.74E+00	3.73E+00	3.72E+00	3.71E+00	3.69E+00	3.68E+00	3.67E+00	3.66E+00	3.66E+00	3.65E+00
tc 99m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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0 Part B BBW 15x15, 3.00wt%, 20g-cd/wtu decay fission products page 149

nuclide radioactivity, curies
basis =per BBW assembly, 0.409 mtihm for grams

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
zr100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb100m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

tc100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BW 15x15, 3.00wt%, 20gwd/mtu decay fission products page 150

0 nuclide radioactivity, curies
basis =per BW assembly, 0.409 mtm for grams

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
y106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

rh106m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd107	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02
pd107m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag108m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag110m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BBW 15x15, 3.00wt%, 20gwd/mtu decay fission products page 151

0 nuclide radioactivity, curies

basis =per BBW assembly, 0.409 mtm for grams

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
cd110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

cd111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd113	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14
cd113m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in113m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in115	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12
in115m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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0 nuclide radioactivity, curies
basis =per BBU assembly, 0.409 mtihm for grams

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sn115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

rh117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn119m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BBW 15x15, 3.00wt%, 20gal/stu decay fission products page 153

0 nuclide radioactivity, curies

basis =per BBW assembly, 0.409 mtms for grams

initial 16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr	
pd121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn121m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

sb122m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te123	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14
te123m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb124m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te125m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn126	1.25E-01	1.24E-01	1.23E-01	1.22E-01	1.22E-01	1.21E-01	1.20E-01	1.19E-01	1.18E-01	1.17E-01	1.17E-01

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Part B BBU 15x15, 3.00wt%, 20gwd/mtu decay fission products page 154

0 nuclide radioactivity, curies
basis =per BBU assembly, 0.409 mtm for grams

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sb126	1.75E-02	1.74E-02	1.73E-02	1.71E-02	1.70E-02	1.69E-02	1.68E-02	1.67E-02	1.66E-02	1.64E-02	1.63E-02
sb126m	1.25E-01	1.24E-01	1.23E-01	1.22E-01	1.22E-01	1.21E-01	1.20E-01	1.19E-01	1.18E-01	1.17E-01	1.17E-01
te126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

sb128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i129	8.81E-03	8.81E-03	8.81E-03	8.81E-03	8.81E-03	8.81E-03	8.81E-03	8.81E-03	8.81E-03	8.81E-03	8.81E-03
xe129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe129m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BBU 15x15, 3.00wt%, 20gwd/mtu decay fission products page 155

0 nuclide radioactivity, curies
basis wper BBU assembly, 0.409 mtihm for grams

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
cd132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

sn134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs135	2.03E-01	2.03E-01	2.03E-01	2.03E-01	2.03E-01	2.03E-01	2.03E-01	2.03E-01	2.03E-01	2.03E-01	2.03E-01
cs135m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba136m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BSW 15x15, 3.00wt%, 20gwd/mtu decay fission products page 156

0 nuclide radioactivity, curies
basis wper BSW assembly, 0.409 mtm for grams

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sb137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba137m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la138	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11
sb139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

i140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce142	7.76E-06	7.76E-06	7.76E-06	7.76E-06	7.76E-06	7.76E-06	7.76E-06	7.76E-06	7.76E-06	7.76E-06	7.76E-06	7.76E-06
pr142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr142m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 157

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nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtms for grams

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
xe143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd144	4.06E-10	4.06E-10	4.06E-10	4.06E-10	4.06E-10	4.06E-10	4.06E-10	4.06E-10	4.06E-10	4.06E-10	4.06E-10
i145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
La145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

ba146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm146	6.14E-08	6.14E-08	6.14E-08	6.14E-08	6.14E-08	6.14E-08	6.14E-08	6.14E-08	6.14E-08	6.14E-08	6.14E-08
xe147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm147	2.06E-06	2.06E-06	2.06E-06	2.06E-06	2.06E-06	2.06E-06	2.06E-06	2.06E-06	2.06E-06	2.06E-06	2.06E-06
cs148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BW 15x15, 3.00wt%, 20gwd/mtu decay fission products page 158

0 nuclide radioactivity, curies
basis =per BW assembly, 0.409 mtihm for grams

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sm148	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12
cs149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm149	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13
eu149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

nd152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu152m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd152	6.98E-13	6.98E-13	6.98E-13	6.98E-13	6.98E-13	6.98E-13	6.98E-13	6.98E-13	6.98E-13	6.98E-13	6.98E-13	6.98E-13
la153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 159

0 nuclide radioactivity, curies

basis =per B&W assembly, 0.409 mtihm for grams

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sm154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

pm159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 160

0 nuclide radioactivity, curies

basis =per B&W assembly, 0.409 mtm for grams

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
dy161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166m	7.37E-09	4.14E-09	2.32E-09	1.30E-09	7.31E-10	4.10E-10	2.30E-10	1.29E-10	7.25E-11	4.07E-11	2.28E-11
er166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er167	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er167m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

er170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	5.10E+00	5.08E+00	5.06E+00	5.04E+00	5.03E+00	5.01E+00	4.99E+00	4.98E+00	4.96E+00	4.94E+00	4.93E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay actinides page 164

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nuclide radioactivity, curies

basis =per B&W assembly, 0.409 mtrm for grams

	initial	35000. yr	45000. yr	50000. yr	55000. yr	60000. yr	65000. yr	70000. yr	100000. yr	200000. yr	250000. yr
he 4	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tl206	1.66E-07	2.27E-07	2.81E-07	3.05E-07	3.28E-07	3.50E-07	3.70E-07	3.88E-07	4.90E-07	5.91E-07	5.90E-07
tl207	6.30E-03	8.31E-03	1.00E-02	1.08E-02	1.15E-02	1.22E-02	1.28E-02	1.34E-02	1.59E-02	1.89E-02	1.90E-02
tl208	1.87E-07	2.03E-07	2.19E-07	2.27E-07	2.36E-07	2.44E-07	2.53E-07	2.62E-07	3.16E-07	5.14E-07	6.21E-07
tl209	4.85E-04	7.78E-04	1.07E-03	1.22E-03	1.36E-03	1.50E-03	1.64E-03	1.77E-03	2.52E-03	4.59E-03	4.96E-03
pb206	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb207	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb209	2.31E-02	3.71E-02	5.11E-02	5.80E-02	6.49E-02	7.15E-02	7.81E-02	8.45E-02	1.20E-01	2.19E-01	2.36E-01
pb210	1.26E-01	1.72E-01	2.13E-01	2.31E-01	2.48E-01	2.66E-01	2.80E-01	2.94E-01	3.71E-01	4.48E-01	4.47E-01
pb211	6.32E-03	8.33E-03	1.01E-02	1.09E-02	1.16E-02	1.22E-02	1.28E-02	1.34E-02	1.59E-02	1.88E-02	1.91E-02
pb212	5.21E-07	5.64E-07	6.10E-07	6.33E-07	6.56E-07	6.80E-07	7.04E-07	7.28E-07	8.80E-07	1.43E-06	1.73E-06
pb214	1.26E-01	1.72E-01	2.13E-01	2.31E-01	2.48E-01	2.66E-01	2.80E-01	2.94E-01	3.71E-01	4.48E-01	4.47E-01
bi208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi209	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210	1.26E-01	1.72E-01	2.13E-01	2.31E-01	2.48E-01	2.66E-01	2.80E-01	2.94E-01	3.71E-01	4.48E-01	4.47E-01
bi211	6.32E-03	8.33E-03	1.01E-02	1.09E-02	1.16E-02	1.22E-02	1.28E-02	1.34E-02	1.59E-02	1.88E-02	1.91E-02
bi212	5.21E-07	5.64E-07	6.10E-07	6.33E-07	6.56E-07	6.80E-07	7.04E-07	7.28E-07	8.80E-07	1.43E-06	1.73E-06
bi213	2.31E-02	3.71E-02	5.11E-02	5.80E-02	6.49E-02	7.15E-02	7.81E-02	8.45E-02	1.20E-01	2.19E-01	2.36E-01
bi214	1.26E-01	1.72E-01	2.13E-01	2.31E-01	2.49E-01	2.66E-01	2.80E-01	2.94E-01	3.71E-01	4.48E-01	4.47E-01
po210	1.26E-01	1.72E-01	2.13E-01	2.31E-01	2.48E-01	2.66E-01	2.80E-01	2.94E-01	3.71E-01	4.48E-01	4.47E-01
po211m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
po211	1.74E-05	2.29E-05	2.77E-05	2.98E-05	3.18E-05	3.36E-05	3.53E-05	3.69E-05	4.38E-05	5.17E-05	5.25E-05
po212	3.34E-07	3.62E-07	3.91E-07	4.05E-07	4.20E-07	4.36E-07	4.51E-07	4.67E-07	5.63E-07	9.17E-07	1.11E-06
po213	2.28E-02	3.63E-02	5.01E-02	5.68E-02	6.35E-02	7.00E-02	7.64E-02	8.27E-02	1.17E-01	2.14E-01	2.31E-01
po214	1.26E-01	1.72E-01	2.13E-01	2.31E-01	2.48E-01	2.66E-01	2.80E-01	2.94E-01	3.71E-01	4.48E-01	4.47E-01
po215	6.32E-03	8.33E-03	1.01E-02	1.09E-02	1.16E-02	1.22E-02	1.28E-02	1.34E-02	1.59E-02	1.88E-02	1.91E-02
po216	5.21E-07	5.64E-07	6.10E-07	6.33E-07	6.56E-07	6.80E-07	7.04E-07	7.28E-07	8.80E-07	1.43E-06	1.73E-06
po218	1.26E-01	1.72E-01	2.13E-01	2.31E-01	2.49E-01	2.66E-01	2.80E-01	2.94E-01	3.71E-01	4.48E-01	4.47E-01
at217	2.31E-02	3.71E-02	5.11E-02	5.81E-02	6.49E-02	7.15E-02	7.81E-02	8.45E-02	1.20E-01	2.19E-01	2.36E-01
rn218	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rn219	6.32E-03	8.33E-03	1.01E-02	1.09E-02	1.16E-02	1.22E-02	1.28E-02	1.34E-02	1.59E-02	1.88E-02	1.91E-02
rn220	5.21E-07	5.64E-07	6.10E-07	6.33E-07	6.56E-07	6.80E-07	7.04E-07	7.28E-07	8.80E-07	1.43E-06	1.73E-06
rn222	1.26E-01	1.72E-01	2.13E-01	2.31E-01	2.49E-01	2.66E-01	2.80E-01	2.94E-01	3.71E-01	4.48E-01	4.47E-01
fr221	2.31E-02	3.71E-02	5.11E-02	5.81E-02	6.49E-02	7.15E-02	7.81E-02	8.45E-02	1.20E-01	2.19E-01	2.36E-01
fr223	8.72E-05	1.15E-04	1.39E-04	1.50E-04	1.60E-04	1.69E-04	1.77E-04	1.85E-04	2.20E-04	2.59E-04	2.63E-04
ra222	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ra223	6.32E-03	8.33E-03	1.01E-02	1.09E-02	1.16E-02	1.22E-02	1.28E-02	1.34E-02	1.59E-02	1.88E-02	1.91E-02
ra224	5.21E-07	5.64E-07	6.10E-07	6.33E-07	6.56E-07	6.80E-07	7.04E-07	7.28E-07	8.80E-07	1.43E-06	1.73E-06
ra225	2.31E-02	3.71E-02	5.11E-02	5.81E-02	6.49E-02	7.15E-02	7.81E-02	8.45E-02	1.20E-01	2.19E-01	2.36E-01
ra226	1.26E-01	1.72E-01	2.13E-01	2.31E-01	2.49E-01	2.66E-01	2.80E-01	2.94E-01	3.71E-01	4.48E-01	4.47E-01

INFORMATION ONLY

ra228	1.47E-07	2.12E-07	2.78E-07	3.11E-07	3.44E-07	3.77E-07	4.10E-07	4.43E-07	6.42E-07	1.30E-06	1.63E-06
ac225	2.31E-02	3.71E-02	5.11E-02	5.81E-02	6.49E-02	7.15E-02	7.81E-02	8.45E-02	1.20E-01	2.19E-01	2.36E-01
ac227	6.32E-03	8.33E-03	1.01E-02	1.09E-02	1.16E-02	1.22E-02	1.28E-02	1.34E-02	1.59E-02	1.88E-02	1.91E-02
ac228	1.47E-07	2.12E-07	2.78E-07	3.11E-07	3.44E-07	3.77E-07	4.10E-07	4.43E-07	6.42E-07	1.30E-06	1.63E-06
th226	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th227	6.23E-03	8.22E-03	9.93E-03	1.07E-02	1.14E-02	1.21E-02	1.27E-02	1.32E-02	1.57E-02	1.85E-02	1.88E-02
th228	5.21E-07	5.64E-07	6.10E-07	6.33E-07	6.56E-07	6.80E-07	7.04E-07	7.28E-07	8.80E-07	1.43E-06	1.73E-06
th229	2.31E-02	3.71E-02	5.11E-02	5.81E-02	6.49E-02	7.15E-02	7.81E-02	8.45E-02	1.20E-01	2.19E-01	2.36E-01
th230	1.37E-01	1.82E-01	2.22E-01	2.39E-01	2.56E-01	2.72E-01	2.87E-01	3.01E-01	3.67E-01	4.45E-01	4.41E-01
th231	1.66E-02	1.72E-02	1.77E-02	1.79E-02	1.81E-02	1.82E-02	1.84E-02	1.85E-02	1.89E-02	1.92E-02	1.92E-02

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Part B BBW 15x15, 3.00wt%, 20gwd/mtu decay actinides page 165

0 nuclide radioactivity, curies

basis per BBW assembly, 0.409 mtihm for grams

	initial	35000. yr	45000. yr	50000. yr	55000. yr	60000. yr	65000. yr	70000. yr	100000. yr	200000. yr	250000. yr
th232	1.47E-07	2.12E-07	2.78E-07	3.11E-07	3.44E-07	3.77E-07	4.10E-07	4.43E-07	6.42E-07	1.30E-06	1.63E-06
th233	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th234	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
pa231	6.32E-03	8.33E-03	1.01E-02	1.08E-02	1.16E-02	1.22E-02	1.28E-02	1.34E-02	1.59E-02	1.88E-02	1.91E-02
pa232	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pa233	3.80E-01	3.79E-01	3.78E-01	3.77E-01	3.76E-01	3.76E-01	3.75E-01	3.74E-01	3.71E-01	3.59E-01	3.53E-01
pa234m	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
pa234	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04
pa235	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u230	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u231	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u232	3.74E-07	3.52E-07	3.31E-07	3.22E-07	3.12E-07	3.03E-07	2.94E-07	2.85E-07	2.38E-07	1.30E-07	9.63E-08
u233	3.86E-02	5.31E-02	6.70E-02	7.37E-02	8.02E-02	8.66E-02	9.28E-02	9.89E-02	1.32E-01	2.14E-01	2.42E-01
u234	6.52E-01	6.38E-01	6.25E-01	6.18E-01	6.12E-01	6.06E-01	5.99E-01	5.93E-01	5.56E-01	4.56E-01	4.16E-01
u235	1.66E-02	1.72E-02	1.77E-02	1.79E-02	1.81E-02	1.82E-02	1.84E-02	1.85E-02	1.89E-02	1.92E-02	1.92E-02
u236	1.31E-01	1.33E-01	1.34E-01	1.34E-01	1.34E-01	1.34E-01	1.34E-01	1.34E-01	1.34E-01	1.34E-01	1.33E-01
u237	2.45E-08	1.08E-08	4.80E-09	3.19E-09	2.12E-09	1.41E-09	9.39E-10	6.25E-10	5.41E-11	1.55E-14	2.63E-16
u238	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
u239	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u240	1.35E-12	1.87E-12	2.38E-12	2.63E-12	2.88E-12	3.12E-12	3.36E-12	3.61E-12	5.00E-12	9.07E-12	1.08E-11
u241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np235	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236	4.20E-06	3.96E-06	3.72E-06	3.61E-06	3.51E-06	3.40E-06	3.30E-06	3.20E-06	2.67E-06	1.44E-06	1.08E-06
np237	3.80E-01	3.79E-01	3.78E-01	3.77E-01	3.76E-01	3.76E-01	3.75E-01	3.74E-01	3.71E-01	3.59E-01	3.53E-01
np238	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np239	1.92E-01	7.44E-02	2.92E-02	1.83E-02	1.14E-02	7.13E-03	4.46E-03	2.79E-03	1.66E-04	1.66E-08	3.03E-09
np240m	1.35E-12	1.87E-12	2.38E-12	2.63E-12	2.88E-12	3.12E-12	3.36E-12	3.61E-12	5.00E-12	9.07E-12	1.08E-11
np240	1.62E-15	2.24E-15	2.85E-15	3.15E-15	3.45E-15	3.75E-15	4.04E-15	4.33E-15	6.00E-15	1.09E-14	1.30E-14
np241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu236	3.74E-07	3.52E-07	3.31E-07	3.22E-07	3.12E-07	3.03E-07	2.94E-07	2.85E-07	2.38E-07	1.30E-07	9.63E-08
pu237	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu238	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu239	8.00E+01	6.00E+01	4.50E+01	3.90E+01	3.38E+01	2.93E+01	2.53E+01	2.19E+01	9.26E+00	5.22E-01	1.24E-01
pu240	1.09E+01	3.79E+00	1.32E+00	7.78E-01	4.59E-01	2.70E-01	1.59E-01	9.40E-02	3.95E-03	1.02E-07	5.30E-10
pu241	1.08E-03	4.54E-04	2.01E-04	1.34E-04	8.88E-05	5.91E-05	3.93E-05	2.61E-05	2.28E-06	6.49E-10	1.10E-11
pu242	2.68E-01	2.63E-01	2.58E-01	2.56E-01	2.53E-01	2.51E-01	2.49E-01	2.46E-01	2.33E-01	1.93E-01	1.78E-01
pu243	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.92E-09	2.91E-09	2.90E-09
pu244	1.35E-12	1.87E-12	2.38E-12	2.63E-12	2.88E-12	3.13E-12	3.37E-12	3.61E-12	5.01E-12	9.08E-12	1.08E-11
pu245	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu246	2.26E-17	1.52E-17	1.02E-17	8.35E-18	6.84E-18	5.61E-18	4.60E-18	3.77E-18	1.14E-18	2.12E-20	2.85E-21
am239	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am240	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am241	1.07E-03	4.54E-04	2.01E-04	1.34E-04	8.88E-05	5.91E-05	3.93E-05	2.61E-05	2.28E-06	6.84E-10	1.10E-11
am242m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

am242	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am243	1.92E-01	7.49E-02	2.92E-02	1.83E-02	1.14E-02	7.13E-03	4.46E-03	2.79E-03	1.66E-04	1.66E-08	3.03E-09
am244m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am244	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am245	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am246	2.26E-17	1.52E-17	1.02E-17	8.35E-18	6.84E-18	5.61E-18	4.60E-18	3.77E-18	1.14E-18	2.12E-20	2.89E-21
cm241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BBW 15x15, 3.00wt%, 20gwd/mtu decay — actinides — page 166

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nuclide radioactivity, curies
basis =per BBW assembly, 0.409 mtihm for grams

	initial	35000. yr	45000. yr	50000. yr	55000. yr	60000. yr	65000. yr	70000. yr	100000. yr	200000. yr	250000. yr
cm242	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm243	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm244	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm245	1.02E-03	4.53E-04	2.00E-04	1.33E-04	8.87E-05	5.90E-05	3.92E-05	2.61E-05	2.28E-06	6.48E-10	1.10E-11
cm246	2.36E-05	5.44E-06	1.26E-06	6.06E-07	2.91E-07	1.40E-07	6.73E-08	3.24E-08	3.99E-10	1.73E-16	1.18E-19
cm247	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.91E-09	2.90E-09
cm248	6.62E-09	6.48E-09	6.35E-09	6.29E-09	6.23E-09	6.16E-09	6.10E-09	6.04E-09	5.68E-09	4.63E-09	4.18E-09
cm249	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm250	9.05E-17	6.07E-17	4.08E-17	3.34E-17	2.74E-17	2.24E-17	1.84E-17	1.51E-17	4.56E-18	8.48E-20	1.16E-20
cm251	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk249	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk250	1.27E-17	8.50E-18	5.71E-18	4.68E-18	3.83E-18	3.14E-18	2.57E-18	2.11E-18	6.38E-19	1.19E-20	1.62E-21
bk251	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf249	2.55E-29	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf250	1.27E-17	8.50E-18	5.71E-18	4.68E-18	3.83E-18	3.14E-18	2.57E-18	2.11E-18	6.38E-19	1.19E-20	1.62E-21
cf251	5.63E-18	2.50E-21	1.11E-24	2.34E-26	4.94E-28	1.04E-29	2.28E-31	.00E+00	.00E+00	.00E+00	.00E+00
cf252	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf253	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf254	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es253	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
s250	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	9.51E+01	6.84E+01	5.14E+01	4.50E+01	3.97E+01	3.52E+01	3.14E+01	2.81E+01	1.64E+01	9.12E+00	8.81E+00

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Part B BBW 15x15, 3.00wt%, 20gwd/mtu decay — fission products — page 184

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nuclide radioactivity, curies
basis =per BBW assembly, 0.409 mtihm for grams

	initial	35000. yr	45000. yr	50000. yr	55000. yr	60000. yr	65000. yr	70000. yr	100000. yr	200000. yr	250000. yr
h 3	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
li 6	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
li 7	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
be 9	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
be 10	8.17E-07	8.13E-07	8.10E-07	8.08E-07	8.06E-07	8.05E-07	8.03E-07	8.01E-07	7.91E-07	7.57E-07	7.41E-07
c 14	1.62E-06	4.82E-07	1.44E-07	7.85E-08	4.29E-08	2.34E-08	1.28E-08	6.98E-09	1.85E-10	1.03E-15	2.43E-18
ni 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 67	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 67	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 68	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 69	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 69m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 69	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

sn 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn 71m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 71m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BW 15x15, 3.00wt%, 20gwd/mtu decay fission products page 185

0 nuclide radioactivity, curies

basis =per BW assembly, 0.409 mtm for grams

	initial 35000. yr	45000. yr	50000. yr	55000. yr	60000. yr	65000. yr	70000. yr	100000. yr	200000. yr	250000. yr
sn 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 77m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 77m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

ge 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 79	1.14E-01	9.22E-02	7.47E-02	6.73E-02	6.06E-02	5.45E-02	4.91E-02	4.42E-02	2.35E-02	2.88E-03	1.01E-03
se 79m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 79m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 80m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 81	1.36E-08	1.32E-08	1.28E-08	1.26E-08	1.23E-08	1.22E-08	1.20E-08	1.18E-08	1.07E-08	7.70E-09	6.55E-09
kr 81m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BBU 15x15, 3.00wt%, 20gwd/mtu decay fission products page 186

0 nuclide radioactivity, curies
basis spar BBU assembly, 0.409 mtihm for grams

	initial	35000. yr	45000. yr	50000. yr	55000. yr	60000. yr	65000. yr	70000. yr	100000. yr	200000. yr	250000. yr
ge 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 82m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 82m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 83m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

br 84m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 85m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 86m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 87	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06	6.21E-06
sr 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 87m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BW 15x15, 3.00wt%, 20gwd/mtu decay fission products page 187

0 nuclide radioactivity, curies
basis per BW assembly, 0.409 mtihm for grams

	initial	35000. yr	45000. yr	50000. yr	55000. yr	60000. yr	65000. yr	70000. yr	100000. yr	200000. yr	250000. yr
br 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

br 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	1.32E-20	4.92E-25	1.85E-29	1.14E-31	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 92	3.65E-12	3.64E-12	3.64E-12	3.64E-12	3.64E-12	3.64E-12	3.64E-12	3.64E-12	3.64E-12	3.64E-12	3.63E-12	3.63E-12
se 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 93	3.45E-01	3.43E-01	3.42E-01	3.41E-01	3.40E-01	3.40E-01	3.39E-01	3.38E-01	3.34E-01	3.19E-01	3.12E-01	
rb 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
rb 93m	3.45E-01	3.43E-01	3.42E-01	3.41E-01	3.40E-01	3.40E-01	3.39E-01	3.38E-01	3.34E-01	3.19E-01	3.12E-01	
br 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B 8&W 15x15, 3.00wt%, 20gwd/stu decay fission products page 188

0 nuclide radioactivity, curies
basis per 8&W assembly, 0.409 atms for gases

	initial	35000. yr	45000. yr	50000. yr	55000. yr	60000. yr	65000. yr	70000. yr	100000. yr	200000. yr	250000. yr
sr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 94	9.97E-06	7.08E-06	5.03E-06	4.26E-06	3.58E-06	3.02E-06	2.54E-06	2.14E-06	7.70E-07	2.53E-08	4.59E-09
rb 94m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 95m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

rb 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 97m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 98m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc 98	1.18E-06	1.18E-06	1.18E-06	1.18E-06	1.18E-06	1.17E-06	1.17E-06	1.17E-06	1.17E-06	1.15E-06	1.14E-06
rb 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 99m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc 99	3.63E+00	3.52E+00	3.40E+00	3.35E+00	3.29E+00	3.24E+00	3.19E+00	3.14E+00	2.84E+00	2.05E+00	1.74E+00
tc 99m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BW 15x15, 3.00wt%, 20gwd/mtu decay fission products page 189

0 nuclide radioactivity, curies

basis per BW assembly, 0.409 mtm for grams

	initial	35000. yr	45000. yr	50000. yr	55000. yr	60000. yr	65000. yr	70000. yr	100000. yr	200000. yr	250000. yr
zr100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb100m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

ru103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay — fission products — page 190

0 nuclide radioactivity, curies

basis =per B&W assembly, 0.409 mtm for grams

	initial	35000. yr	45000. yr	50000. yr	55000. yr	60000. yr	65000. yr	70000. yr	100000. yr	200000. yr	250000. yr
y106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd107	2.63E-02	2.62E-02	2.62E-02	2.62E-02	2.62E-02	2.62E-02	2.61E-02	2.61E-02	2.60E-02	2.58E-02	2.56E-02
pd107m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag108m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

mo109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag110m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 191

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

	initial	35000. yr	45000. yr	50000. yr	55000. yr	60000. yr	65000. yr	70000. yr	100000. yr	200000. yr	250000. yr
cd110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd113	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14	1.56E-14
cd113m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in113m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

ag114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in115	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12
in115m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 192

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

	initial	35000. yr	45000. yr	50000. yr	55000. yr	60000. yr	65000. yr	70000. yr	100000. yr	200000. yr	250000. yr
sn115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

in119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn119m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00w%, 20gwd/mtu decay fission products page 193

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

	initial	35000. yr	45000. yr	50000. yr	55000. yr	60000. yr	65000. yr	70000. yr	100000. yr	200000. yr	250000. yr
pd121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn121m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb122m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te123	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14	8.63E-14
te123m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb124m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

sn125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te125m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn126	1.17E-01	1.03E-01	1.02E-01	9.81E-02	9.47E-02	9.15E-02	8.84E-02	8.54E-02	6.93E-02	3.47E-02	2.45E-02

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Part B BBW 15x15, 3.00wt%, 20gwd/mtu decay fission products page 194

0 nuclide radioactivity, curies
basis =per BBW assembly, 0.409 mtim for grams

	initial	35000. yr	45000. yr	50000. yr	55000. yr	60000. yr	65000. yr	70000. yr	100000. yr	200000. yr	250000. yr
sb126	1.63E-02	1.52E-02	1.42E-02	1.37E-02	1.33E-02	1.28E-02	1.24E-02	1.20E-02	9.71E-03	4.85E-03	3.43E-03
sb126m	1.17E-01	1.03E-01	1.02E-01	9.81E-02	9.47E-02	9.15E-02	8.84E-02	8.54E-02	6.93E-02	3.47E-02	2.45E-02
te126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i129	8.81E-03	8.81E-03	8.80E-03	8.80E-03	8.80E-03	8.80E-03	8.80E-03	8.79E-03	8.78E-03	8.74E-03	8.72E-03
xe129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe129m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

sn131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BBW 15x15, 3.00wt%, 20gwd/mtu decay fission products page 195

0 nuclide radioactivity, curies

basis =per BBW assembly, 0.409 mtm for grams

	initial	35000. yr	45000. yr	50000. yr	55000. yr	60000. yr	65000. yr	70000. yr	100000. yr	200000. yr	250000. yr
cd132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs135	2.03E-01	2.02E-01	2.01E-01	2.01E-01	2.01E-01	2.00E-01	2.00E-01	2.00E-01	1.98E-01	1.93E-01	1.89E-01
cs135m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

xe136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba136m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 196

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

	initial	35000. yr	45000. yr	50000. yr	55000. yr	60000. yr	65000. yr	70000. yr	100000. yr	200000. yr	250000. yr
sb137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba137m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la138	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11	5.39E-11
sb139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce142	7.78E-06	7.78E-06	7.78E-06	7.78E-06	7.78E-06	7.78E-06	7.78E-06	7.78E-06	7.78E-06	7.78E-06	7.78E-06
pr142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr142m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

	initial	35000. yr	45000. yr	50000. yr	55000. yr	60000. yr	65000. yr	70000. yr	100000. yr	200000. yr	250000. yr
i143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

	initial	35000. yr	45000. yr	50000. yr	55000. yr	60000. yr	65000. yr	70000. yr	100000. yr	200000. yr	250000. yr
xe143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd144	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10
i145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm146	6.14E-08	6.14E-08	6.14E-08	6.14E-08	6.14E-08	6.14E-08	6.14E-08	6.14E-08	6.14E-08	6.14E-08	6.13E-08
xe147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm147	2.06E-06	2.06E-06	2.06E-06	2.06E-06	2.06E-06	2.06E-06	2.06E-06	2.06E-06	2.06E-06	2.06E-06	2.06E-06
cs148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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INFORMATION ONLY

0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams

	initial	35000. yr	45000. yr	50000. yr	55000. yr	60000. yr	65000. yr	70000. yr	100000. yr	200000. yr	250000. yr
sm148	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12	8.82E-12
cs149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm149	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13	3.41E-13
eu149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu152m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd152	6.98E-13	6.98E-13	6.98E-13	6.98E-13	6.98E-13	6.98E-13	6.98E-13	6.98E-13	6.98E-13	6.98E-13	6.98E-13
la153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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0 nuclide radioactivity, curies
basis =per B&W assembly, 0.409 mtm for grams
initial 35000. yr 45000. yr 50000. yr 55000. yr 60000. yr 65000. yr 70000. yr 100000. yr 200000. yr 250000. yr

INFORMATION ONLY

sm154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B BBW 15x15, 3.00wt%, 20gwd/mtu decay fission products page: 200

0 nuclide radioactivity, curies

basis =per BBW assembly, 0.409 mtihm for grams

	initial	35000. yr	45000. yr	50000. yr	55000. yr	60000. yr	65000. yr	70000. yr	100000. yr	200000. yr	250000. yr
dy161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

eu162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166m	2.28E-11	7.08E-14	2.19E-16	1.22E-17	6.80E-19	3.79E-20	2.11E-21	1.17E-22	3.49E-30	.00E+00	.00E+00
er165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er167	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er167m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	4.93E+00	4.77E+00	4.62E+00	4.54E+00	4.47E+00	4.40E+00	4.34E+00	4.27E+00	3.91E+00	2.99E+00	2.66E+00

1

```
=origens
0$$  a8 26 a11 71 e
1$$ 1  1t
 b&w 15x15, 3.0%/20 Decay
3$$ 21 0 1  e
'   3$$ 21 0 1  a33  -88
2t
35$$ 0  t
'  54$$ a8 1 e
'   56$$ 0 7 a5 1 a13 -1 a15 3 0 4 e   5t
56$$ 0 7 a13 -1 a15 3 0 4 e   5t
Part C 10000 year criticality at 2.182 kw/package
B&W 15x15, 3.00wt%, 20gwd/mtu /per assembly basis.
60**  0 1 90 365.25 730.5 1826.25  3652.5
'  61** f1-20
'  65$$ a4 1 2z 1 2z 1 5z 1 2z 1
'   a25 1 2z 1 2z 1 5z 1 2z 1
'   a46 1 2z 1 2z 1 5z 1 2z 1 e
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
6t
'   56$$ 0 -6 a10 1  e  t
56$$ 0 10 a10 7 a14 5 a17 4 e  57** 10  e  5t
60**  15 20 30 50 100 150 200 250 300 400
'  61** f1-20
'  65$$ a4 1 2z 1 2z 1 5z 1 2z 1
'   a25 1 2z 1 2z 1 5z 1 2z 1
'   a46 1 2z 1 2z 1 5z 1 2z 1 e
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
6t
56$$ 0 10 a10 10 a14 5 a17 4 e  57** 400  e  5t
60**  500 1+3 2+3 4+3 6+3 8+3 1+4 1.2+4 1.4+4 1.5+4
'    61** f1-20
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
6t
56$$ 10 10 0 a10 10 a14 5 a17 4 1 e  57** 1.5+4  e  5t
58**  1.039-4 1.039-4 1.039-4 1.039-4 1.039-4 1.039-4 1.039-4 1.039-4
      1.039-4 1.039-4
60**  1.6+4 1.7+4 1.8+4 1.9+4 2.0+4 2.1+4 2.2+4 2.3+4 2.4+4 2.5+4
'  61** f1-20
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
66$$  0 0 0 0 2 0 0 0 2  e
6t
56$$ 0 10  a10 10 a14 5 a17 4 1 e  57** 2.5+4  e  5t
60**  2.503+4 2.6+4 3.5+4 4.5+4 6.5+4 8.5+4 9.5+4 1.05+5 1.15+5 1.25+5
'    61** f1-20
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
6t
56$$ 0 4 a10 10 a14 5 a17 4 e  57** 1.25+5  e  5t
60**  2.5+5 5+5 7.5+5 999999
'  61** f1-20
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
6t
'   56$$ 0 -10 a10 1 e  t
56$$ f0  t
end
```

```
=origens
0$$  a8 26 a11 71 e
1$$ 1  1t
 b&w 15x15, 3.0%/20 Decay
3$$ 21 0 1  e
'   3$$ 21 0 1  a33  -88
2t
35$$ 0  t
'  54$$ a8 1 e
'   56$$ 0 7 a5 1 a13 -1 a15 3 0 4 e   5t
56$$ 0 7 a13 -1 a15 3 0 4 e   5t
Part D 1000 year criticality at 2.182 kw/package
B&W 15x15, 3.00wt%, 20gwd/mtu /per assembly basis
60**  0 1 90 365.25 730.5 1826.25  3652.5
'  61** f1-20
'  65$$ a4 1 2z 1 2z 1 5z 1 2z 1
'   a25 1 2z 1 2z 1 5z 1 2z 1
'   a46 1 2z 1 2z 1 5z 1 2z 1 e
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
6t
'   56$$ 0 -6 a10 1  e  t
56$$ 0 10 a10 7 a14 5 a17 4 e  57** 10  e  5t
60**  15 20 30 50 100 150 200 250 300 400
'  61** f1-20
'  65$$ a4 1 2z 1 2z 1 5z 1 2z 1
'   a25 1 2z 1 2z 1 5z 1 2z 1
'   a46 1 2z 1 2z 1 5z 1 2z 1 e
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0.0 e
6t
56$$ 0 10 a10 10 a14 5 a17 4 e  57** 400  e  5t
60**  500 1+3 2+3 4+3 6+3 8+3 1+4 1.2+4 1.4+4 1.5+4
'    61** f1-20
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
6t
56$$ 1 1 0 a10 10 a14 5 a17 4 1 e  57** 1.5+4  e  5t
58**  1.039-4
60**  1.6+4
'  61** f1-20
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
66$$  0 0 0 0 2 0 0 0 2  e
6t
56$$ 0 10 a10 1 a14 5 a17 4 1 e  57** 1.6+4  e  5t
60**  1.6030+4 1.7+4 1.8+4 1.9+4 2.0+4 2.1+4 2.2+4 2.3+4 2.4+4 2.5+4
'  61** f1-20
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
66$$  0 0 0 0 2 0 0 0 2  e
6t
56$$ 0 10  a10 10 a14 5 a17 4 1 e  57** 2.5+4  e  5t
60**  3.5+4 4.5+4 5.5+4 6.5+4 7.5+4 8.5+4 9.5+4 1.05+5 1.15+5 1.25+5
'    61** f1-20
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
6t
56$$ 0 4 a10 10 a14 5 a17 4 e  57** 1.25+5  e  5t
60**  2.5+5 5+5 7.5+5 999999
'  61** f1-20
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
6t
'   56$$ 0 -10 a10 1 e  t
56$$ f0  t
end
```

```
=origens
0$$  a8 26 a11 71 e
1$$ 1  1t
 b&w 15x15, 3.0%/20 Decay
3$$ 21 0 1  e
'   3$$ 21 0 1  a33  -88
2t
35$$ 0  t
'  54$$ a8 1 e
'   56$$ 0 7 a5 1 a13 -1 a15 3 0 4 e  5t
56$$ 0 7 a13 -1 a15 3 0 4 e  5t
Part E 5000 year criticality at 2.182 kw/package
B&W 15x15, 3.00wt%, 20gwd/mtu /per assembly basis
60**  0 1 90 365.25 730.5 1826.25  3652.5
'  61** f1-20
'  65$$ a4 1 2z 1 2z 1 5z 1 2z 1
'   a25 1 2z 1 2z 1 5z 1 2z 1
'   a46 1 2z 1 2z 1 5z 1 2z 1 e
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
6t
'   56$$ 0 -6 a10 1  e  t
56$$ 0 10 a10 7 a14 5 a17 4 e  57** 10  e  5t
60**  15 20 30 50 100 150 200 250 300 400
'  61** f1-20
'  65$$ a4 1 2z 1 2z 1 5z 1 2z 1
'   a25 1 2z 1 2z 1 5z 1 2z 1
'   a46 1 2z 1 2z 1 5z 1 2z 1 e
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
6t
56$$ 0 10 a10 10 a14 5 a17 4 e  57** 400  e  5t
60**  500 1+3 2+3 4+3 6+3 8+3 1+4 1.2+4 1.4+4 1.5+4
'    61** f1-20
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
6t
56$$ 5 5 0 a10 10 a14 5 a17 4 1 e  57** 1.5+4  e  5t
58**  1.039-4 1.039-4 1.039-4 1.039-4 1.039-4
60**  1.6+4 1.7+4 1.8+4 1.9+4 2.0+4
'  61** f1-20
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
66$$  0 0 0 0 2 0 0 0 2  e
6t
56$$ 0 6 a10 5 a14 5 a17 4 1 e  57** 2.0+4  e  5t
60**  2.0030+4 2.1+4 2.2+4 2.3+4 2.4+4 2.5+4
'  61** f1-20
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
66$$  0 0 0 0 2 0 0 0 2  e
6t
56$$ 0 10  a10 6 a14 5 a17 4 1 e  57** 2.5+4  e  5t
60**  3.5+4 4.5+4 5.5+4 6.5+4 7.5+4 8.5+4 9.5+4 1.05+5 1.15+5 1.25+5
'    61** f1-20
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
6t
56$$ 0 4 a10 10 a14 5 a17 4 e  57** 1.25+5  e  5t
60**  2.5+5 5+5 7.5+5 999999
'  61** f1-20
65$$ a25 1 0 0 1 0 0 0 a46 1 0 0 1 0 0 0 e
6t
'   56$$ 0 -10 a10 1 e  t
56$$ f0  t
end
```

INFORMATION ONLY

Part D 1000 year criticality at 2.182 kw/package actinides page 145
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.795E+01mwd, flux= 2.86E+08n/cm**2-sec
0 nuclide radioactivity, curies
basis =88W 15x15, 3.00wt%, 20gcd/mtu /per assem

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
he 4	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tl206	1.05E-07	1.05E-07	1.12E-07	1.19E-07	1.26E-07	1.33E-07	1.40E-07	1.47E-07	1.54E-07	1.60E-07	1.67E-07
tl207	4.95E-03	4.95E-03	5.15E-03	5.37E-03	5.59E-03	5.81E-03	6.03E-03	6.23E-03	6.44E-03	6.65E-03	6.85E-03
tl208	2.30E-04	1.77E-04	1.94E-07	1.84E-07	1.85E-07	1.87E-07	1.88E-07	1.89E-07	1.91E-07	1.92E-07	1.94E-07
tl209	2.40E-04	2.41E-04	2.65E-04	2.91E-04	3.17E-04	3.44E-04	3.71E-04	3.99E-04	4.27E-04	4.55E-04	4.84E-04
pb206	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb207	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb209	1.14E-02	1.15E-02	1.26E-02	1.39E-02	1.51E-02	1.64E-02	1.77E-02	1.90E-02	2.03E-02	2.17E-02	2.30E-02
pb210	7.99E-02	7.99E-02	8.52E-02	9.05E-02	9.57E-02	1.01E-01	1.06E-01	1.11E-01	1.16E-01	1.21E-01	1.26E-01
pb211	4.94E-03	4.94E-03	5.16E-03	5.39E-03	5.61E-03	5.83E-03	6.04E-03	6.25E-03	6.46E-03	6.67E-03	6.87E-03
pb212	6.41E-04	4.91E-04	5.40E-07	5.11E-07	5.15E-07	5.19E-07	5.23E-07	5.27E-07	5.31E-07	5.35E-07	5.40E-07
pb214	7.99E-02	8.00E-02	8.52E-02	9.05E-02	9.58E-02	1.01E-01	1.06E-01	1.11E-01	1.16E-01	1.21E-01	1.26E-01
bi208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi209	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210	7.99E-02	7.99E-02	8.52E-02	9.05E-02	9.57E-02	1.01E-01	1.06E-01	1.11E-01	1.16E-01	1.21E-01	1.26E-01
bi211	4.94E-03	4.94E-03	5.16E-03	5.39E-03	5.61E-03	5.83E-03	6.04E-03	6.25E-03	6.46E-03	6.67E-03	6.87E-03
bi212	6.41E-04	4.91E-04	5.40E-07	5.11E-07	5.15E-07	5.19E-07	5.23E-07	5.27E-07	5.31E-07	5.35E-07	5.40E-07
bi213	1.14E-02	1.15E-02	1.26E-02	1.39E-02	1.51E-02	1.64E-02	1.77E-02	1.90E-02	2.03E-02	2.17E-02	2.30E-02
bi214	7.99E-02	8.00E-02	8.52E-02	9.05E-02	9.58E-02	1.01E-01	1.06E-01	1.11E-01	1.16E-01	1.21E-01	1.26E-01
po210	7.99E-02	7.99E-02	8.52E-02	9.05E-02	9.57E-02	1.01E-01	1.06E-01	1.11E-01	1.16E-01	1.21E-01	1.26E-01
po211m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
po211	1.36E-05	1.36E-05	1.42E-05	1.48E-05	1.54E-05	1.60E-05	1.66E-05	1.72E-05	1.78E-05	1.83E-05	1.89E-05
po212	4.11E-04	3.15E-04	3.46E-07	3.28E-07	3.30E-07	3.33E-07	3.35E-07	3.38E-07	3.40E-07	3.43E-07	3.46E-07
po213	1.12E-02	1.12E-02	1.24E-02	1.36E-02	1.48E-02	1.60E-02	1.73E-02	1.86E-02	1.99E-02	2.12E-02	2.26E-02
po214	7.99E-02	8.00E-02	8.52E-02	9.05E-02	9.57E-02	1.01E-01	1.06E-01	1.11E-01	1.16E-01	1.21E-01	1.26E-01
po215	4.94E-03	4.94E-03	5.16E-03	5.39E-03	5.61E-03	5.83E-03	6.04E-03	6.25E-03	6.46E-03	6.67E-03	6.87E-03
po216	6.41E-04	4.91E-04	5.40E-07	5.11E-07	5.15E-07	5.19E-07	5.23E-07	5.27E-07	5.31E-07	5.35E-07	5.40E-07
po218	7.99E-02	8.01E-02	8.52E-02	9.05E-02	9.58E-02	1.01E-01	1.06E-01	1.11E-01	1.16E-01	1.21E-01	1.26E-01
at217	1.14E-02	1.15E-02	1.26E-02	1.39E-02	1.51E-02	1.64E-02	1.77E-02	1.90E-02	2.03E-02	2.17E-02	2.30E-02
rn218	5.04E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rn219	4.94E-03	4.94E-03	5.16E-03	5.39E-03	5.61E-03	5.83E-03	6.04E-03	6.25E-03	6.46E-03	6.67E-03	6.87E-03
rn220	6.41E-04	4.91E-04	5.40E-07	5.11E-07	5.15E-07	5.19E-07	5.23E-07	5.27E-07	5.31E-07	5.35E-07	5.40E-07
rn222	7.99E-02	8.01E-02	8.52E-02	9.05E-02	9.58E-02	1.01E-01	1.06E-01	1.11E-01	1.16E-01	1.21E-01	1.26E-01
fr221	1.14E-02	1.15E-02	1.26E-02	1.39E-02	1.51E-02	1.64E-02	1.77E-02	1.90E-02	2.03E-02	2.17E-02	2.30E-02
fr223	6.82E-05	6.82E-05	7.13E-05	7.43E-05	7.74E-05	8.04E-05	8.33E-05	8.63E-05	8.91E-05	9.20E-05	9.48E-05
ra222	5.04E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ra223	4.94E-03	4.94E-03	5.16E-03	5.39E-03	5.61E-03	5.82E-03	6.04E-03	6.25E-03	6.46E-03	6.67E-03	6.87E-03
ra224	6.41E-04	4.91E-04	5.40E-07	5.11E-07	5.15E-07	5.19E-07	5.23E-07	5.27E-07	5.31E-07	5.35E-07	5.40E-07
ra225	1.14E-02	1.15E-02	1.26E-02	1.39E-02	1.51E-02	1.64E-02	1.77E-02	1.90E-02	2.03E-02	2.17E-02	2.30E-02
ra226	7.99E-02	8.01E-02	8.52E-02	9.05E-02	9.58E-02	1.01E-01	1.06E-01	1.11E-01	1.16E-01	1.21E-01	1.26E-01
ra228	8.97E-08	8.98E-08	9.59E-08	1.02E-07	1.09E-07	1.15E-07	1.21E-07	1.28E-07	1.34E-07	1.41E-07	1.47E-07
ac225	1.14E-02	1.15E-02	1.26E-02	1.39E-02	1.51E-02	1.64E-02	1.77E-02	1.90E-02	2.03E-02	2.17E-02	2.30E-02
ac227	4.94E-03	4.94E-03	5.16E-03	5.39E-03	5.61E-03	5.82E-03	6.04E-03	6.25E-03	6.46E-03	6.67E-03	6.87E-03
ac228	8.97E-08	8.98E-08	9.59E-08	1.02E-07	1.09E-07	1.15E-07	1.21E-07	1.28E-07	1.34E-07	1.41E-07	1.47E-07
th226	5.04E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th227	4.87E-03	4.88E-03	5.08E-03	5.31E-03	5.53E-03	5.74E-03	5.96E-03	6.16E-03	6.37E-03	6.57E-03	6.78E-03
th228	6.41E-04	4.91E-04	5.40E-07	5.11E-07	5.15E-07	5.19E-07	5.23E-07	5.27E-07	5.31E-07	5.35E-07	5.40E-07
th229	1.14E-02	1.15E-02	1.26E-02	1.39E-02	1.51E-02	1.64E-02	1.77E-02	1.90E-02	2.03E-02	2.17E-02	2.30E-02
th230	9.22E-02	9.23E-02	9.75E-02	1.03E-01	1.08E-01	1.13E-01	1.18E-01	1.23E-01	1.28E-01	1.33E-01	1.38E-01
th231	4.96E-02	1.56E-02	1.57E-02	1.58E-02	1.59E-02	1.60E-02	1.61E-02	1.62E-02	1.63E-02	1.64E-02	1.64E-02

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Part D 1000 year criticality at 2.182 kw/package actinides page 146
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.795E+01mwd, flux= 2.86E+08n/cm**2-sec

0 nuclide radioactivity, curies
basis =88W 15x15, 3.00wt%, 20gcd/mtu /per assem

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
th232	8.97E-08	8.98E-08	9.59E-08	1.00E-07	1.09E-07	1.15E-07	1.21E-07	1.28E-07	1.34E-07	1.41E-07	1.47E-07
th233	4.06E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th234	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
pa231	4.94E-03	4.94E-03	5.16E-03	5.38E-03	5.60E-03	5.82E-03	6.03E-03	6.25E-03	6.46E-03	6.66E-03	6.87E-03
pa232	5.90E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pa233	3.82E-01	3.82E-01	3.82E-01	3.82E-01	3.82E-01	3.82E-01	3.82E-01	3.81E-01	3.81E-01	3.81E-01	3.81E-01
pa234m	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
pa234	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04
pa235	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u230	5.04E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u231	1.25E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u232	6.41E-04	4.78E-04	4.43E-07	4.09E-07	4.07E-07	4.04E-07	4.00E-07	3.99E-07	3.97E-07	3.95E-07	3.93E-07
u233	2.48E-02	2.49E-02	2.64E-02	2.79E-02	2.95E-02	3.10E-02	3.25E-02	3.40E-02	3.56E-02	3.71E-02	3.85E-02
u234	6.71E-01	6.72E-01	6.71E-01	6.70E-01	6.68E-01	6.67E-01	6.66E-01	6.64E-01	6.63E-01	6.61E-01	6.59E-01
u235	1.56E-02	1.56E-02	1.57E-02	1.58E-02	1.59E-02	1.60E-02	1.61E-02	1.62E-02	1.63E-02	1.64E-02	1.64E-02
u236	1.27E-01	1.27E-01	1.27E-01	1.28E-01	1.29E-01	1.29E-01	1.30E-01	1.30E-01	1.31E-01	1.31E-01	1.32E-01
u237	2.86E+00	1.83E-05	4.64E-08	4.28E-08	3.94E-08	3.63E-08	3.35E-08	3.09E-08	2.84E-08	2.62E-08	2.42E-08
u238	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
u239	6.56E+01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u240	8.71E-13	8.73E-13	9.27E-13	9.82E-13	1.04E-12	1.09E-12	1.15E-12	1.20E-12	1.26E-12	1.31E-12	1.37E-12
u241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np235	5.34E-07	2.52E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236m	1.08E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236	4.65E-06	4.66E-06	4.63E-06	4.60E-06	4.57E-06	4.54E-06	4.52E-06	4.49E-06	4.46E-06	4.43E-06	4.41E-06
np237	3.82E-01	3.82E-01	3.82E-01	3.82E-01	3.82E-01	3.82E-01	3.82E-01	3.81E-01	3.81E-01	3.81E-01	3.81E-01
np238	2.88E+00	7.72E-06	6.56E-08	4.81E-10	3.52E-12	2.58E-14	1.89E-16	1.39E-18	1.02E-20	7.45E-23	5.46E-25
np239	6.60E+01	4.78E-01	4.36E-01	3.97E-01	3.61E-01	3.28E-01	2.99E-01	2.72E-01	2.48E-01	2.26E-01	2.05E-01
np240m	8.71E-13	8.73E-13	9.27E-13	9.82E-13	1.04E-12	1.09E-12	1.15E-12	1.20E-12	1.26E-12	1.31E-12	1.37E-12
np240	1.01E-06	1.05E-15	1.11E-15	1.18E-15	1.25E-15	1.31E-15	1.38E-15	1.44E-15	1.51E-15	1.57E-15	1.64E-15
np241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu236	5.00E-05	4.53E-07	4.12E-07	4.07E-07	4.07E-07	4.04E-07	4.02E-07	3.99E-07	3.97E-07	3.95E-07	3.92E-07
pu237	6.29E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu238	2.89E+00	2.28E+00	1.08E-03	4.88E-07	8.28E-10	5.05E-12	3.67E-14	2.69E-16	1.97E-18	1.44E-20	1.06E-22
pu239	1.04E+02	1.04E+02	1.01E+02	9.83E+01	9.56E+01	9.25E+01	9.00E+01	8.77E+01	8.52E+01	8.28E+01	8.05E+01
pu240	2.94E+01	2.93E+01	2.66E+01	2.38E+01	2.14E+01	1.95E+01	1.73E+01	1.56E+01	1.40E+01	1.26E+01	1.14E+01
pu241	3.24E+00	7.63E-01	1.94E-03	1.79E-03	1.65E-03	1.52E-03	1.40E-03	1.29E-03	1.19E-03	1.10E-03	1.01E-03
pu242	2.71E-01	2.71E-01	2.71E-01	2.70E-01	2.70E-01	2.69E-01	2.69E-01	2.68E-01	2.68E-01	2.67E-01	2.67E-01
pu243	3.71E-01	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09
pu244	8.72E-13	8.74E-13	9.28E-13	9.83E-13	1.04E-12	1.09E-12	1.15E-12	1.20E-12	1.26E-12	1.31E-12	1.37E-12
pu245	7.69E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu246	3.24E-17	3.23E-17	3.11E-17	2.99E-17	2.87E-17	2.76E-17	2.65E-17	2.55E-17	2.45E-17	2.35E-17	2.26E-17
am239	2.10E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am240	2.10E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am241	2.59E+00	2.59E+00	5.45E-01	1.11E-01	2.37E-02	6.02E-03	2.36E-03	1.52E-03	1.27E-03	1.15E-03	1.08E-03
am242m	1.99E-03	1.72E-03	1.46E-05	1.07E-07	7.83E-10	5.74E-12	4.20E-14	3.08E-16	2.26E-18	1.65E-20	1.21E-22
am242	1.36E-02	1.71E-03	1.45E-05	1.06E-07	7.75E-10	5.71E-12	4.18E-14	3.07E-16	2.25E-18	1.65E-20	1.21E-22
am243	4.79E-01	4.78E-01	4.36E-01	3.97E-01	3.61E-01	3.28E-01	2.99E-01	2.72E-01	2.48E-01	2.26E-01	2.05E-01
am244m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am244	1.70E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am245	7.97E-13	1.41E-24	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am246	3.24E-17	3.23E-17	3.11E-17	2.99E-17	2.87E-17	2.76E-17	2.65E-17	2.55E-17	2.45E-17	2.35E-17	2.26E-17
cm241	2.31E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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decay, following reactor irradiation identified by: power= 1.09E-04mw, burnup=3.795E+01mwd, flux= 2.86E+08n/cm**2-sec

0 nuclide radioactivity, curies
basis =88W 15x15, 3.00wt%, 20gcd/mtu /per assem

	initial	16080.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
cm242	1.13E-02	1.41E-03	1.20E-05	8.79E-08	6.44E-10	4.72E-12	3.46E-14	2.54E-16	1.86E-18	1.36E-20	9.95E-23
cm243	4.32E-09	2.08E-09	1.18E-19	3.24E-30	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm244	1.70E-02	5.37E-03	3.95E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm245	2.10E-03	2.10E-03	1.94E-03	1.79E-03	1.66E-03	1.52E-03	1.40E-03	1.29E-03	1.19E-03	1.09E-03	1.01E-03
cm246	9.65E-05	9.61E-05	8.34E-05	7.20E-05	6.22E-05	5.37E-05	4.64E-05	4.01E-05	3.46E-05	2.99E-05	2.58E-05
cm247	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09	2.93E-09
cm248	7.00E-09	7.00E-09	6.99E-09	6.97E-09	6.96E-09	6.95E-09	6.93E-09	6.92E-09	6.90E-09	6.88E-09	6.87E-09
cm249	1.97E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm250	1.28E-16	1.28E-16	1.24E-16	1.20E-16	1.15E-16	1.10E-16	1.06E-16	1.02E-16	9.80E-17	9.41E-17	9.05E-17
cm251	3.10E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk249	1.97E-09	9.70E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk250	2.74E-14	1.81E-17	1.74E-17	1.67E-17	1.61E-17	1.55E-17	1.49E-17	1.43E-17	1.37E-17	1.32E-17	1.27E-17
bk251	3.10E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf249	1.66E-09	1.57E-09	2.31E-10	3.20E-11	4.42E-12	6.12E-13	8.46E-14	1.17E-14	1.62E-15	2.24E-16	3.10E-17
cf250	1.84E-12	3.75E-13	1.74E-17	1.67E-17	1.61E-17	1.55E-17	1.49E-17	1.43E-17	1.37E-17	1.32E-17	1.27E-17
cf251	6.15E-15	6.01E-15	2.84E-15	1.31E-15	6.07E-16	2.80E-16	1.30E-16	5.99E-17	2.77E-17	1.28E-17	5.91E-18
cf252	1.50E-16	5.79E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf253	1.37E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf254	5.70E-31	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es253	1.37E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254	1.82E-29	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
s250	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	2.84E+02	1.43E+02	1.32E+02	1.26E+02	1.21E+02	1.16E+02	1.12E+02	1.08E+02	1.03E+02	9.97E+01	9.61E+01

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Part D 1000 year criticality at 2.182 kw/package fission products page 165
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.795E+01mwd, flux= 2.86E+08n/cm**2-sec
0 nuclide radioactivity, curies
basis =88U 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16080.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
h 3	1.08E-02	1.95E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
li 6	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
li 7	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
be 9	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
be 10	8.23E-07	8.23E-07	8.23E-07	8.23E-07	8.22E-07	8.22E-07	8.22E-07	8.21E-07	8.21E-07	8.21E-07	8.20E-07
c 14	4.93E-06	4.91E-06	4.37E-06	3.87E-06	3.43E-06	3.04E-06	2.69E-06	2.39E-06	2.11E-06	1.87E-06	1.66E-06
ni 66	6.18E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 66	6.21E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 67	7.90E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 67	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 68	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 69	2.71E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 69m	2.20E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 69	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 70	1.01E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 71	1.29E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 71m	5.51E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 71	1.46E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 71m	7.28E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 72	2.01E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 72	1.16E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 72	3.20E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

sn 72	4.10E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 72	4.11E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 73	1.20E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 73	1.31E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 73	7.32E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn 73	1.25E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73	1.27E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73m	1.25E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 74	2.48E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 74	9.13E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 74	9.75E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn 74	3.23E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 74	9.98E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 75	5.08E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 75	4.15E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 75	1.30E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn 75	7.93E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75	9.56E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75	9.62E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75m	5.11E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 76	1.68E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 76	1.09E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 166

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.795E+01mwd, flux= 2.88E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =68J 15x15, 3.00wt%, 20gd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr	yr
sn 76	1.84E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
ge 76	2.70E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
se 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
as 76	3.72E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
se 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
ni 77	3.67E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
cu 77	6.31E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
sn 77	2.24E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
ge 77	5.51E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
ge 77	2.10E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
ge 77m	5.65E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
as 77	6.57E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
se 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
se 77m	2.16E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
ni 78	7.25E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
cu 78	2.36E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
sn 78	2.74E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
ge 78	1.18E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
ge 78	1.95E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
as 78	1.98E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
se 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
cu 79	5.93E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
sn 79	1.38E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
ge 79	1.30E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
ge 79	3.49E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
as 79	3.78E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
se 79	1.38E-01	1.38E-01	1.36E-01	1.33E-01	1.30E-01	1.27E-01	1.24E-01	1.22E-01	1.19E-01	1.17E-01	1.14E-01	
se 79m	3.74E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	

br 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 79m	1.06E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 79	5.21E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 80	6.60E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 80	4.82E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 80	9.60E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 80	9.00E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 80	1.03E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 80	9.41E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 80m	2.34E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 81	6.62E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 81	1.08E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 81	6.19E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 81	9.54E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 81	1.47E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81	1.55E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81m	1.08E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 81	1.44E-08	1.44E-08	1.44E-08	1.43E-08	1.43E-08	1.43E-08	1.42E-08	1.42E-08	1.41E-08	1.41E-08	1.40E-08
kr 81m	1.06E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 82	2.58E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 82	4.42E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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decay, following reactor irradiation identified by: power= 1.089E-04mw, burnup=3.7952E+01mwd, flux= 2.86E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =68U 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	14030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
ge 82	9.38E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 82	1.52E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 82m	5.77E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 82	5.89E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 82m	4.95E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 83	1.19E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 83	4.48E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 83	4.06E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 83	2.44E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83	1.79E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83m	1.95E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 83	3.86E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 83m	3.86E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 84	4.80E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 84	2.68E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 84	1.78E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 84	7.11E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84	7.30E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84m	1.88E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 85	7.03E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 85	4.57E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 85	1.03E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85	3.43E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85m	3.03E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 85	8.26E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 85	1.81E-01	2.60E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

INFORMATION ONLY

kr 85m	8.27E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 86	9.69E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 86	6.12E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 86	8.36E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86	1.02E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86m	1.85E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 86	3.95E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 86m	3.12E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 87	1.02E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 87	3.83E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 87	4.96E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 87	1.33E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 87	1.67E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 87	6.23E-06	6.23E-06	6.23E-06	6.23E-06	6.23E-06	6.23E-06	6.23E-06	6.23E-06	6.23E-06	6.23E-06	6.23E-06
sr 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 87m	1.15E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 88	1.64E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 88	1.78E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 88	2.60E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 168

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.795E+01mwd, flux= 2.86E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =68W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
br 88	1.31E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 88	2.34E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 88	2.40E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 89	2.52E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 89	9.23E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 89	8.95E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 89	2.96E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 89	3.16E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 89	3.18E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89m	2.97E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 90	2.34E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 90	2.00E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 90	4.77E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 90	3.19E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90	2.93E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90m	8.91E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 90	3.84E+00	1.83E+00	7.74E-11	1.56E-21	2.28E-32	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 90	3.84E+00	1.83E+00	7.74E-11	1.56E-21	2.28E-32	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 90m	7.00E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 91	1.93E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 91	1.65E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 91	2.19E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	3.78E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 91	4.02E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91	4.02E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91m	2.33E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	7.72E-11	7.49E-11	2.79E-11	1.01E-11	3.63E-12	1.31E-12	4.72E-13	1.70E-13	6.15E-14	2.22E-14	8.00E-15

INFORMATION ONLY

se 92	1.53E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 92	2.72E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 92	1.16E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 92	3.30E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 92	4.17E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 92	4.21E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 92	7.92E-12	7.92E-12	7.92E-12	7.92E-12	7.92E-12	7.92E-12	7.92E-12	7.92E-12	7.92E-12	7.92E-12	7.92E-12
se 93	1.03E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 93	5.46E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 93	3.91E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 93	2.66E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 93	4.59E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 93	3.11E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 93	3.48E-01	3.48E-01	3.48E-01	3.48E-01	3.47E-01	3.47E-01	3.47E-01	3.47E-01	3.47E-01	3.47E-01	3.44E-01
rb 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 93m	3.48E-01	3.48E-01	3.48E-01	3.48E-01	3.47E-01	3.47E-01	3.47E-01	3.47E-01	3.47E-01	3.47E-01	3.44E-01
br 94	3.38E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 94	1.74E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 94	1.34E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 169

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.795E+01mwd, flux= 2.88E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =88W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sr 94	4.50E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 94	4.88E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 94	1.91E-05	1.91E-05	1.85E-05	1.78E-05	1.72E-05	1.67E-05	1.61E-05	1.56E-05	1.50E-05	1.45E-05	1.40E-05
rb 94m	1.69E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 95	3.73E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 95	1.41E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 95	6.40E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 95	4.02E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 95	4.92E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 95	5.04E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 95	5.03E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 95m	5.59E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 96	8.37E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 96	2.55E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 96	1.61E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 96	2.93E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 96	4.73E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 96	1.28E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 97	3.31E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 97	4.81E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 97	1.49E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 97	3.85E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 97	4.68E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 97	4.71E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 97m	4.45E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 98	1.18E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 98	3.97E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 98	5.91E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 98	2.85E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

zr 98	4.91E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 98	4.94E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 98m	3.36E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc 98	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.19E-06
nb 99	1.17E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 99	2.53E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 99	1.81E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 99	4.77E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 99	3.09E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 99m	2.11E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 99	5.26E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc 99	3.78E+00	3.78E+00	3.75E+00	3.73E+00	3.72E+00	3.71E+00	3.70E+00	3.68E+00	3.67E+00	3.66E+00	3.65E+00
tc 99m	4.63E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb100	3.54E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr100	2.75E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y100	5.28E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 170

decay, following reactor irradiation identified by: power= 1.039E-04kw, burnup=3.792E+01mwd, flux= 2.86E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =88U 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
zr100	4.78E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb100	5.13E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb100m	3.50E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc100	8.08E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb101	2.91E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr101	4.41E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y101	3.00E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr101	2.67E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb101	4.44E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo101	4.66E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc101	4.66E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr102	8.17E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y102	1.57E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr102	1.90E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb102	3.66E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo102	4.23E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102	4.24E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102m	3.97E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh102	1.34E-05	1.03E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr103	5.67E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y103	4.80E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr103	6.53E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb103	2.53E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo103	3.81E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc103	3.89E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru103	3.91E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103m	3.90E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr104	1.78E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y104	9.40E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr104	1.78E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

rb104	1.04E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo104	2.78E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc104	2.90E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104	2.06E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104m	1.50E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y105	1.19E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr105	6.50E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb105	4.00E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo105	1.88E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc105	2.22E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru105	2.25E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105	2.25E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105m	6.39E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 171

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.795E+01mwd, flux= 2.85E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =BBM 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
y106	2.12E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr106	2.08E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb106	5.85E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo106	9.07E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc106	1.39E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru106	1.55E+00	2.08E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106	1.55E+00	2.08E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106m	6.94E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag106	1.71E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y107	1.93E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr107	2.02E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb107	9.37E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo107	3.21E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc107	8.65E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru107	1.07E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh107	1.08E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd107	2.64E-02	2.64E-02	2.64E-02	2.64E-02	2.64E-02	2.64E-02	2.64E-02	2.64E-02	2.64E-02	2.64E-02	2.64E-02
pd107m	7.93E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr108	8.35E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb108	2.69E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo108	3.66E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc108	2.54E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru108	6.41E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108	6.54E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108m	1.26E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag108	1.84E-04	1.64E-07	8.22E-10	3.50E-12	1.44E-14	6.37E-17	2.71E-19	1.16E-21	4.93E-24	2.10E-26	8.95E-29
ag108m	2.22E-06	1.88E-06	9.45E-09	4.03E-11	1.72E-13	7.32E-16	3.12E-18	1.33E-20	5.66E-23	2.41E-25	1.03E-27
cd108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr109	6.74E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb109	1.17E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo109	3.86E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc109	8.58E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru109	4.56E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109	5.43E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109m	2.71E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

pd109	6.28E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109m	3.41E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109m	6.28E-01	5.68E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd109	7.67E-09	5.68E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb110	5.34E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo110	4.26E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc110	1.11E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru110	1.29E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110	2.68E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110m	1.56E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag110	2.93E-01	9.75E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag110m	1.16E-02	7.17E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 172

decay, following reactor irradiation identified by: power= 1.03E-04mw, burnup=3.7952E+01mwd, flux= 2.85E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =88W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
cd110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb111	4.26E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo111	4.59E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc111	2.24E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru111	4.12E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh111	9.05E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111	9.77E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111m	5.20E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111	9.85E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111m	9.81E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111m	1.30E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb112	1.82E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo112	7.54E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc112	4.47E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru112	1.50E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh112	3.86E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd112	4.86E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag112	4.90E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo113	1.57E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc113	1.23E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru113	5.10E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh113	1.91E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd113	2.94E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113	2.87E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113m	5.77E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd113	1.42E-14	1.42E-14	1.42E-14	1.42E-14	1.42E-14	1.42E-14	1.42E-14	1.42E-14	1.42E-14	1.42E-14	1.42E-14
cd113m	6.66E-04	1.52E-04	2.98E-25	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in113m	3.31E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo114	8.05E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc114	2.10E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru114	2.14E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh114	1.08E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd114	2.55E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag114	2.68E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114	7.17E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114m	5.40E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

sn114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo115	3.61E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc115	7.82E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru115	5.30E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh115	4.67E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd115	1.62E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115	1.28E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115m	5.36E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115	1.81E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115m	8.43E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in115	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12
in115m	1.81E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 173

decay, following reactor irradiation identified by: power= 1.09E-04mw, burnup=3.79ZE+01mwd, flux= 2.8E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =68W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sn115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc116	3.36E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru116	1.87E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh116	2.59E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd116	1.95E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116	2.21E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116m	2.64E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116	3.48E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116m	1.31E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc117	4.15E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru117	2.93E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh117	9.91E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd117	1.27E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117	1.09E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117m	1.05E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117	1.91E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117m	4.33E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117	1.42E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117m	1.75E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117m	1.09E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc118	1.23E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru118	4.78E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh118	2.36E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd118	6.07E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118	1.05E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118m	7.47E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd118	1.83E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118	1.83E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118m	2.19E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru119	6.33E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh119	9.18E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd119	3.63E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag119	1.29E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119	1.32E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119m	5.98E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119	7.77E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119m	1.19E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

sn119m	1.47E-04	8.13E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru120	7.90E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh120	1.98E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd120	1.86E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag120	8.22E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd120	1.81E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120	1.84E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120m	3.04E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh121	5.54E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 174

decay, following reactor irradiation identified by: power= 1.03E-0/mt, burnup=3.752E+01md, flux= 2.85E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =8W 15x15, 3.00wt%, 20gcd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
pd121	7.91E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag121	6.00E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd121	1.83E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121	1.67E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121m	1.86E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn121	2.01E-02	1.15E-04	5.63E-10	1.90E-15	6.38E-21	2.15E-26	6.86E-32	.00E+00	.00E+00	.00E+00	.00E+00
sn121m	2.15E-04	1.48E-04	7.25E-10	2.44E-15	8.23E-21	2.77E-26	9.13E-32	.00E+00	.00E+00	.00E+00	.00E+00
sb121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh122	6.13E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd122	2.62E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag122	3.11E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd122	1.97E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122	2.18E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122m	2.13E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb122	1.86E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb122m	1.86E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh123	5.22E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd123	4.57E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag123	1.23E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd123	1.26E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123	1.58E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123m	4.32E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123	1.83E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123m	2.11E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te123	8.71E-14	8.71E-14	8.71E-14	8.71E-14	8.71E-14	8.71E-14	8.71E-14	8.71E-14	8.71E-14	8.71E-14	8.71E-14
te123m	1.19E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd124	2.51E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag124	9.84E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd124	2.08E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in124	3.66E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb124	1.50E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb124m	3.19E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd125	6.15E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag125	4.73E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd125	1.31E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125	2.09E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125m	1.57E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125	1.19E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125m	3.71E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

INFORMATION ONLY

sb125	4.91E-02	2.42E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te125m	1.13E-02	5.91E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd126	1.36E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag126	1.91E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd126	1.45E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in126	4.69E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn126	1.25E-01	1.25E-01	1.24E-01	1.23E-01	1.22E-01	1.21E-01	1.21E-01	1.20E-01	1.19E-01	1.18E-01	1.17E-01

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Part D 1000 year criticality at 2.182 kw/package fission products page 175

decay, following reactor irradiation identified by: power= 1.039E-01kw, burnup=3.795E+01mwd, flux= 2.86E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =68J 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sb126	1.80E-02	1.75E-02	1.73E-02	1.72E-02	1.71E-02	1.70E-02	1.69E-02	1.68E-02	1.66E-02	1.65E-02	1.64E-02
sb126m	1.26E-01	1.25E-01	1.24E-01	1.23E-01	1.22E-01	1.21E-01	1.21E-01	1.20E-01	1.19E-01	1.18E-01	1.17E-01
te126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag127	1.04E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd127	1.08E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127	4.23E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127m	4.23E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127	8.25E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127m	1.12E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb127	2.08E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127	2.05E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127m	3.60E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe127	6.49E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag128	5.23E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd128	1.10E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in128	8.62E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn128	3.74E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128	3.73E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128m	3.93E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i128	1.70E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd129	5.45E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in129	9.90E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129	3.25E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129m	3.43E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb129	8.51E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129	8.06E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129m	1.62E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i129	8.85E-03	8.85E-03	8.85E-03	8.85E-03	8.85E-03	8.85E-03	8.85E-03	8.85E-03	8.85E-03	8.85E-03	8.85E-03
xe129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe129m	3.70E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd130	2.08E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in130	7.77E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn130	9.54E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130	2.83E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130m	1.27E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130	4.09E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130m	2.17E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd131	3.14E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in131	3.21E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn131	7.97E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

sb131	2.23E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131	2.35E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131m	5.06E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i131	2.76E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131m	3.02E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 176

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.795ZE+01mwd, flux= 2.88E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =88W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr	yr
cd132	3.84E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in132	8.71E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn132	6.38E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132	1.27E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132m	1.30E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te132	3.98E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i132	4.04E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs132	8.96E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in133	2.61E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn133	1.78E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb133	1.89E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133	3.18E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133m	2.62E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133	5.80E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133m	4.18E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133	5.82E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133m	1.79E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba133	5.23E-10	7.25E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in134	4.35E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn134	2.91E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134	3.53E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134m	2.40E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te134	5.33E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134	6.50E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134m	4.97E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134m	1.04E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134	1.00E+00	4.43E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134m	8.08E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn135	2.50E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb135	1.52E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te135	2.75E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i135	5.47E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135	5.91E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135m	1.19E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs135	2.08E-01	2.08E-01	2.08E-01	2.08E-01	2.08E-01	2.08E-01	2.08E-01	2.08E-01	2.08E-01	2.08E-01	2.08E-01	2.08E-01
cs135m	1.75E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135m	1.27E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn136	2.21E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb136	2.35E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te136	1.27E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136	2.58E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136m	1.23E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

xe136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs136	1.61E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba136m	1.58E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 177

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+01mwd, flux= 2.85E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =86W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sb137	3.02E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te137	4.23E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i137	2.70E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe137	5.24E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs137	5.50E+00	2.75E+00	5.07E-10	4.67E-20	4.31E-30	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba137m	5.19E+00	2.60E+00	4.78E-10	4.41E-20	4.06E-30	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb138	3.21E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te138	9.84E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i138	1.35E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe138	5.05E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138	5.42E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138m	2.04E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la138	5.41E-11	5.41E-11	5.41E-11	5.41E-11	5.41E-11	5.41E-11	5.41E-11	5.41E-11	5.41E-11	5.41E-11	5.41E-11
sb139	2.47E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te139	1.57E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i139	7.21E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe139	3.86E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs139	5.10E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba139	5.22E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce139	3.18E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr139	1.64E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te140	2.38E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i140	1.70E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe140	2.73E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs140	4.59E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba140	5.17E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la140	5.27E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr140	5.70E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te141	2.75E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i141	2.21E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe141	1.04E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs141	3.53E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba141	4.78E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la141	4.80E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce141	4.80E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd141	7.33E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te142	9.99E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i142	5.19E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe142	4.04E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs142	2.06E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba142	4.57E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la142	4.71E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce142	7.79E-06	7.79E-06	7.79E-06	7.79E-06	7.79E-06	7.79E-06	7.79E-06	7.79E-06	7.79E-06	7.79E-06	7.79E-06
pr142	1.18E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr142m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

nd142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i143	7.14E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 178

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.795ZE+01mwd, flux= 2.88E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =88U 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
xe143	5.88E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs143	1.08E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba143	3.98E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la143	4.56E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce143	4.59E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr143	4.59E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i144	2.87E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe144	1.24E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs144	3.01E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba144	3.17E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la144	4.07E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce144	4.15E+00	1.10E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144	4.15E+00	1.10E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144m	5.83E-02	1.54E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd144	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10
i145	9.05E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe145	1.21E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs145	7.07E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba145	1.38E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la145	2.78E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce145	3.03E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr145	3.09E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm145	1.98E-05	6.38E-06	2.08E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm145	1.93E-05	3.83E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe146	1.11E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs146	1.70E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba146	7.42E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la146	1.83E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce146	2.42E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr146	2.44E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm146	3.98E-07	9.20E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm146	6.29E-08	6.29E-08	6.29E-08	6.29E-08	6.29E-08	6.29E-08	6.29E-08	6.29E-08	6.29E-08	6.29E-08	6.29E-08
xe147	3.52E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs147	3.44E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba147	1.12E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la147	7.56E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce147	1.80E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr147	1.88E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd147	1.90E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm147	1.90E+00	6.95E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm147	2.07E-06	2.07E-06	2.07E-06	2.07E-06	2.07E-06	2.07E-06	2.07E-06	2.07E-06	2.07E-06	2.07E-06	2.07E-06
cs148	6.28E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba148	2.19E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la148	2.33E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce148	1.26E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr148	1.44E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148	2.13E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148m	2.20E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 179

decay, following reactor irradiation identified by: power= 1.03E-04mw, burnup=3.7952E+01mwd, flux= 2.86E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =68J 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16000.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr	
sm148	8.87E-12	8.87E-12	8.87E-12	8.87E-12	8.87E-12	8.87E-12	8.87E-12	8.87E-12	8.87E-12	8.87E-12	8.87E-12	8.87E-12
cs149	5.21E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba149	2.42E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la149	6.49E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce149	6.41E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr149	9.63E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd149	1.02E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm149	1.02E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm149	2.83E-13	2.83E-13	2.83E-13	2.83E-13	2.83E-13	2.83E-13	2.83E-13	2.83E-13	2.83E-13	2.83E-13	2.83E-13	2.83E-13
eu149	1.65E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs150	6.66E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba150	2.19E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la150	1.04E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce150	2.72E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr150	5.73E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm150	3.29E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu150	2.04E-06	1.14E-06	7.98E-15	3.12E-23	1.14E-31	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba151	2.22E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la151	1.78E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce151	7.44E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr151	2.88E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd151	4.83E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm151	4.85E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm151	7.92E-01	6.25E-01	3.58E-04	1.62E-07	7.30E-11	3.30E-14	1.49E-17	6.72E-21	3.03E-24	1.37E-27	6.16E-31	
eu151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba152	4.72E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la152	1.44E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce152	7.00E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr152	8.58E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd152	3.11E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152	3.22E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152m	1.10E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu152	6.61E-01	1.39E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu152m	3.55E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd152	3.53E-12	3.55E-12	3.56E-12	3.56E-12	3.56E-12	3.56E-12	3.56E-12	3.56E-12	3.56E-12	3.56E-12	3.56E-12	3.56E-12
la153	1.45E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce153	3.48E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr153	3.74E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd153	1.73E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm153	2.09E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm153	9.44E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd153	4.73E-04	1.04E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la154	3.77E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce154	3.51E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr154	6.47E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd154	7.82E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154	9.93E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154m	2.11E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.795ZE+01mwd, flux= 2.86E+08n/cm**2-sec
0 nuclide radioactivity, curies
basis =88W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sm154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu154	4.64E-01	4.12E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la155	1.91E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce155	3.10E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr155	1.43E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd155	2.54E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm155	5.97E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm155	7.33E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu155	7.40E-02	8.70E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce156	2.42E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr156	1.92E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd156	8.00E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm156	2.71E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm156	4.32E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu156	4.37E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce157	1.17E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr157	3.06E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd157	1.85E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm157	1.08E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm157	2.48E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu157	2.60E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr158	1.64E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd158	3.12E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm158	2.49E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm158	1.19E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu158	1.37E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr159	7.06E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd159	2.85E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm159	4.93E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm159	4.32E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu159	6.49E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd159	8.25E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd160	1.88E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm160	5.44E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm160	1.22E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu160	2.64E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb160	1.78E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd161	7.81E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm161	6.55E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm161	2.32E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu161	9.68E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd161	1.46E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb161	1.47E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 181
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.795ZE+01mwd, flux= 2.86E+08n/cm**2-sec
0 nuclide radioactivity, curies

basis =66W 15x15, 3.00wt%, 20g-cl/stu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
dy161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm162	4.41E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm162	3.80E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu162	2.57E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd162	6.66E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162	6.80E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162m	1.41E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm163	2.92E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu163	4.81E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd163	2.34E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163	2.74E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm164	2.16E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu164	5.48E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd164	6.94E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb164	1.01E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm165	1.13E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu165	5.93E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd165	1.48E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb165	3.49E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165	4.18E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165m	3.14E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy166	6.35E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166	5.97E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166m	4.00E-07	3.93E-07	2.25E-07	1.26E-07	7.07E-08	3.97E-08	2.23E-08	1.25E-08	7.02E-09	3.94E-09	2.21E-09
er166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er167	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er167m	2.09E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er169	1.09E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170	6.85E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er171	1.48E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm171	1.51E-08	3.00E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er172	8.74E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm172	9.20E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	5.25E+02	1.49E+01	5.08E+00	5.06E+00	5.05E+00	5.03E+00	5.01E+00	5.00E+00	4.98E+00	4.96E+00	4.95E+00

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Part D 1000 year criticality at 2.182 kw/package actinides page 185

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.795E+01mwd, flux= 2.86E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =66W 15x15, 3.00wt%, 20g-cl/stu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
he 4	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tl206	1.67E-07	2.28E-07	2.82E-07	3.30E-07	3.72E-07	4.09E-07	4.42E-07	4.70E-07	4.94E-07	5.15E-07	5.32E-07
tl207	6.85E-03	8.74E-03	1.04E-02	1.18E-02	1.30E-02	1.40E-02	1.49E-02	1.56E-02	1.63E-02	1.68E-02	1.72E-02

tl208	1.94E-07	2.09E-07	2.25E-07	2.42E-07	2.59E-07	2.76E-07	2.94E-07	3.12E-07	3.30E-07	3.49E-07	3.68E-07
tl209	4.84E-04	7.77E-04	1.07E-03	1.36E-03	1.64E-03	1.91E-03	2.16E-03	2.40E-03	2.64E-03	2.86E-03	3.07E-03
pb206	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb207	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb209	2.30E-02	3.70E-02	5.11E-02	6.49E-02	7.81E-02	9.08E-02	1.03E-01	1.14E-01	1.26E-01	1.36E-01	1.46E-01
pb210	1.26E-01	1.73E-01	2.14E-01	2.50E-01	2.82E-01	3.10E-01	3.35E-01	3.56E-01	3.74E-01	3.90E-01	4.03E-01
pb211	6.87E-03	8.77E-03	1.04E-02	1.18E-02	1.31E-02	1.41E-02	1.50E-02	1.57E-02	1.63E-02	1.68E-02	1.72E-02
pb212	5.40E-07	5.82E-07	6.27E-07	6.73E-07	7.20E-07	7.68E-07	8.18E-07	8.68E-07	9.19E-07	9.72E-07	1.02E-06
pb214	1.26E-01	1.73E-01	2.14E-01	2.50E-01	2.82E-01	3.10E-01	3.35E-01	3.56E-01	3.74E-01	3.90E-01	4.03E-01
bi208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi209	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210	1.26E-01	1.73E-01	2.14E-01	2.50E-01	2.82E-01	3.10E-01	3.35E-01	3.56E-01	3.74E-01	3.90E-01	4.03E-01
bi211	6.87E-03	8.77E-03	1.04E-02	1.18E-02	1.31E-02	1.41E-02	1.50E-02	1.57E-02	1.63E-02	1.68E-02	1.72E-02
bi212	5.40E-07	5.82E-07	6.27E-07	6.73E-07	7.20E-07	7.68E-07	8.18E-07	8.68E-07	9.19E-07	9.72E-07	1.02E-06
bi213	2.30E-02	3.70E-02	5.11E-02	6.49E-02	7.81E-02	9.08E-02	1.03E-01	1.14E-01	1.26E-01	1.36E-01	1.46E-01
bi214	1.26E-01	1.73E-01	2.14E-01	2.50E-01	2.82E-01	3.10E-01	3.35E-01	3.56E-01	3.74E-01	3.90E-01	4.03E-01
po210	1.26E-01	1.73E-01	2.14E-01	2.50E-01	2.82E-01	3.10E-01	3.35E-01	3.56E-01	3.74E-01	3.90E-01	4.03E-01
po211m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
po211	1.85E-05	2.41E-05	2.85E-05	3.26E-05	3.59E-05	3.87E-05	4.11E-05	4.31E-05	4.48E-05	4.62E-05	4.74E-05
po212	3.46E-07	3.75E-07	4.01E-07	4.31E-07	4.61E-07	4.92E-07	5.24E-07	5.56E-07	5.89E-07	6.22E-07	6.56E-07
po213	2.26E-02	3.62E-02	5.00E-02	6.35E-02	7.66E-02	8.89E-02	1.01E-01	1.12E-01	1.23E-01	1.33E-01	1.43E-01
po214	1.26E-01	1.73E-01	2.14E-01	2.50E-01	2.82E-01	3.10E-01	3.35E-01	3.56E-01	3.74E-01	3.90E-01	4.03E-01
po215	6.87E-03	8.77E-03	1.04E-02	1.18E-02	1.31E-02	1.41E-02	1.50E-02	1.57E-02	1.63E-02	1.68E-02	1.72E-02
po216	5.40E-07	5.82E-07	6.27E-07	6.73E-07	7.20E-07	7.68E-07	8.18E-07	8.68E-07	9.19E-07	9.72E-07	1.02E-06
po218	1.26E-01	1.73E-01	2.14E-01	2.50E-01	2.82E-01	3.10E-01	3.35E-01	3.56E-01	3.74E-01	3.90E-01	4.03E-01
at217	2.30E-02	3.70E-02	5.11E-02	6.49E-02	7.81E-02	9.08E-02	1.03E-01	1.15E-01	1.26E-01	1.36E-01	1.46E-01
rn218	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rn219	6.87E-03	8.77E-03	1.04E-02	1.18E-02	1.31E-02	1.41E-02	1.50E-02	1.57E-02	1.63E-02	1.68E-02	1.72E-02
rn220	5.40E-07	5.82E-07	6.27E-07	6.73E-07	7.20E-07	7.68E-07	8.18E-07	8.68E-07	9.19E-07	9.72E-07	1.02E-06
rn222	1.26E-01	1.73E-01	2.14E-01	2.50E-01	2.82E-01	3.10E-01	3.35E-01	3.56E-01	3.74E-01	3.90E-01	4.03E-01
fr221	2.30E-02	3.70E-02	5.11E-02	6.49E-02	7.81E-02	9.08E-02	1.03E-01	1.15E-01	1.26E-01	1.36E-01	1.46E-01
fr223	9.48E-05	1.21E-04	1.44E-04	1.63E-04	1.80E-04	1.94E-04	2.06E-04	2.16E-04	2.25E-04	2.32E-04	2.38E-04
ra222	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ra223	6.87E-03	8.77E-03	1.04E-02	1.18E-02	1.31E-02	1.41E-02	1.50E-02	1.57E-02	1.63E-02	1.68E-02	1.72E-02
ra224	5.40E-07	5.82E-07	6.27E-07	6.73E-07	7.20E-07	7.68E-07	8.18E-07	8.68E-07	9.19E-07	9.72E-07	1.02E-06
ra225	2.30E-02	3.70E-02	5.11E-02	6.49E-02	7.81E-02	9.08E-02	1.03E-01	1.15E-01	1.26E-01	1.36E-01	1.46E-01
ra226	1.26E-01	1.73E-01	2.14E-01	2.50E-01	2.82E-01	3.10E-01	3.35E-01	3.56E-01	3.74E-01	3.90E-01	4.03E-01
ra228	1.47E-07	2.13E-07	2.79E-07	3.45E-07	4.12E-07	4.78E-07	5.44E-07	6.11E-07	6.77E-07	7.44E-07	8.10E-07
ac225	2.30E-02	3.70E-02	5.11E-02	6.49E-02	7.81E-02	9.08E-02	1.03E-01	1.15E-01	1.26E-01	1.36E-01	1.46E-01
ac227	6.87E-03	8.77E-03	1.04E-02	1.18E-02	1.31E-02	1.41E-02	1.50E-02	1.57E-02	1.63E-02	1.68E-02	1.72E-02
ac228	1.47E-07	2.13E-07	2.79E-07	3.45E-07	4.12E-07	4.78E-07	5.44E-07	6.11E-07	6.77E-07	7.44E-07	8.10E-07
th226	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th227	6.78E-03	8.65E-03	1.03E-02	1.17E-02	1.29E-02	1.39E-02	1.47E-02	1.55E-02	1.61E-02	1.66E-02	1.70E-02
th228	5.40E-07	5.82E-07	6.27E-07	6.73E-07	7.20E-07	7.68E-07	8.18E-07	8.68E-07	9.19E-07	9.72E-07	1.02E-06
th229	2.30E-02	3.70E-02	5.11E-02	6.49E-02	7.81E-02	9.08E-02	1.03E-01	1.15E-01	1.26E-01	1.36E-01	1.46E-01
th230	1.38E-01	1.85E-01	2.23E-01	2.56E-01	2.85E-01	3.14E-01	3.40E-01	3.61E-01	3.78E-01	3.93E-01	4.06E-01
th231	1.64E-02	1.71E-02	1.76E-02	1.80E-02	1.83E-02	1.85E-02	1.87E-02	1.88E-02	1.89E-02	1.90E-02	1.90E-02

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Part D 1000 year criticality at 2.182 kw/package actinides page 186

decay, following reactor irradiation identified by: power= 1.09E-04mw, burnup=3.795E+01mwd, flux= 2.85E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =8BU 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
th232	1.47E-07	2.13E-07	2.79E-07	3.45E-07	4.12E-07	4.78E-07	5.44E-07	6.11E-07	6.77E-07	7.44E-07	8.10E-07
th233	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th234	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
pa231	6.87E-03	8.78E-03	1.04E-02	1.18E-02	1.30E-02	1.41E-02	1.49E-02	1.57E-02	1.63E-02	1.68E-02	1.72E-02
pa232	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

pa233	3.81E-01	3.80E-01	3.79E-01	3.77E-01	3.76E-01	3.75E-01	3.74E-01	3.72E-01	3.71E-01	3.70E-01	3.69E-01
pa234m	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
pa234	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04
pa235	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u230	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u231	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u232	3.90E-07	3.69E-07	3.48E-07	3.27E-07	3.08E-07	2.90E-07	2.73E-07	2.57E-07	2.42E-07	2.28E-07	2.15E-07
u233	3.88E-02	5.31E-02	6.70E-02	8.03E-02	9.25E-02	1.03E-01	1.14E-01	1.27E-01	1.39E-01	1.48E-01	1.57E-01
u234	6.59E-01	6.45E-01	6.31E-01	6.18E-01	6.05E-01	5.93E-01	5.80E-01	5.68E-01	5.56E-01	5.45E-01	5.34E-01
u235	1.64E-02	1.71E-02	1.78E-02	1.80E-02	1.83E-02	1.85E-02	1.87E-02	1.88E-02	1.89E-02	1.90E-02	1.90E-02
u236	1.32E-01	1.34E-01	1.34E-01	1.35E-01	1.35E-01	1.35E-01	1.35E-01	1.35E-01	1.35E-01	1.34E-01	1.34E-01
u237	2.42E-08	1.07E-08	4.73E-09	2.09E-09	9.25E-10	4.09E-10	1.81E-10	8.01E-11	3.54E-11	1.57E-11	6.93E-12
u238	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
u239	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u240	1.37E-12	1.91E-12	2.44E-12	2.95E-12	3.46E-12	3.98E-12	4.45E-12	4.93E-12	5.35E-12	5.85E-12	6.30E-12
u241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np235	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236	4.41E-06	4.15E-06	3.91E-06	3.68E-06	3.46E-06	3.26E-06	3.07E-06	2.89E-06	2.72E-06	2.56E-06	2.41E-06
np237	3.81E-01	3.80E-01	3.79E-01	3.77E-01	3.76E-01	3.75E-01	3.74E-01	3.72E-01	3.71E-01	3.70E-01	3.69E-01
np238	5.46E-25	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np239	2.06E-01	8.02E-02	3.13E-02	1.22E-02	4.78E-03	1.86E-03	7.28E-04	2.84E-04	1.11E-04	4.33E-05	1.69E-05
np240m	1.37E-12	1.91E-12	2.44E-12	2.95E-12	3.46E-12	3.98E-12	4.45E-12	4.93E-12	5.35E-12	5.85E-12	6.30E-12
np240	1.64E-15	2.29E-15	2.92E-15	3.55E-15	4.16E-15	4.75E-15	5.34E-15	5.91E-15	6.47E-15	7.02E-15	7.56E-15
np241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu236	3.92E-07	3.69E-07	3.48E-07	3.27E-07	3.08E-07	2.90E-07	2.73E-07	2.57E-07	2.42E-07	2.28E-07	2.15E-07
pu237	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu238	1.06E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu239	8.05E+01	6.04E+01	4.53E+01	3.40E+01	2.55E+01	1.91E+01	1.43E+01	1.08E+01	8.07E+00	6.06E+00	4.54E+00
pu240	1.14E+01	3.95E+00	1.37E+00	4.78E-01	1.66E-01	5.78E-02	2.01E-02	6.99E-03	2.43E-03	8.45E-04	2.94E-04
pu241	1.01E-03	4.47E-04	1.98E-04	8.75E-05	3.87E-05	1.71E-05	7.57E-06	3.35E-06	1.48E-06	6.55E-07	2.90E-07
pu242	2.67E-01	2.62E-01	2.57E-01	2.53E-01	2.48E-01	2.43E-01	2.39E-01	2.34E-01	2.30E-01	2.26E-01	2.22E-01
pu243	2.93E-09	2.92E-09	2.92E-09	2.92E-09	2.92E-09	2.92E-09	2.92E-09	2.92E-09	2.92E-09	2.91E-09	2.91E-09
pu244	1.37E-12	1.91E-12	2.44E-12	2.96E-12	3.47E-12	3.98E-12	4.45E-12	4.93E-12	5.40E-12	5.86E-12	6.31E-12
pu245	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu246	2.26E-17	1.52E-17	1.02E-17	6.84E-18	4.60E-18	3.09E-18	2.07E-18	1.39E-18	9.34E-19	6.27E-19	4.21E-19
am239	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am240	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am241	1.05E-03	4.47E-04	1.98E-04	8.75E-05	3.87E-05	1.71E-05	7.57E-06	3.35E-06	1.48E-06	6.55E-07	2.90E-07
am242m	1.21E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am242	1.21E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am243	2.06E-01	8.02E-02	3.13E-02	1.22E-02	4.78E-03	1.86E-03	7.28E-04	2.84E-04	1.11E-04	4.33E-05	1.69E-05
am244m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am244	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am245	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am246	2.26E-17	1.52E-17	1.02E-17	6.84E-18	4.60E-18	3.09E-18	2.07E-18	1.39E-18	9.34E-19	6.27E-19	4.21E-19
cm241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

1

Part D 1000 year criticality at 2.182 kw/package actinides page: 187

decay, following reactor irradiation identified by: power= 1.03E-04mw, burnup=3.7952E+01mwd, flux= 2.88E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =BW 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
cm242	9.99E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm243	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm244	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm245	1.01E-03	4.46E-04	1.97E-04	8.73E-05	3.86E-05	1.71E-05	7.56E-06	3.34E-06	1.48E-06	6.54E-07	2.89E-07
cm246	2.58E-05	5.96E-06	1.38E-06	3.18E-07	7.35E-08	1.70E-08	3.92E-09	9.07E-10	2.09E-10	4.84E-11	1.12E-11
cm247	2.93E-09	2.92E-09	2.92E-09	2.92E-09	2.92E-09	2.92E-09	2.92E-09	2.92E-09	2.92E-09	2.91E-09	2.91E-09
cm248	6.87E-09	6.74E-09	6.60E-09	6.47E-09	6.34E-09	6.21E-09	6.08E-09	5.96E-09	5.84E-09	5.72E-09	5.61E-09

INFORMATION ONLY

INFORMATION ONLY

cm249	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm250	9.05E-17	6.07E-17	4.08E-17	2.74E-17	1.84E-17	1.23E-17	8.29E-18	5.56E-18	3.73E-18	2.51E-18	1.68E-18
cm251	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk249	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk250	1.27E-17	8.50E-18	5.71E-18	3.83E-18	2.57E-18	1.73E-18	1.16E-18	7.79E-19	5.23E-19	3.51E-19	2.36E-19
bk251	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf249	3.10E-17	7.97E-26	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf250	1.27E-17	8.50E-18	5.71E-18	3.83E-18	2.57E-18	1.73E-18	1.16E-18	7.79E-19	5.23E-19	3.51E-19	2.36E-19
cf251	5.91E-18	2.63E-21	1.17E-24	5.18E-28	2.28E-31	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf252	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf253	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf254	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es253	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
s250	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	9.61E+01	6.90E+01	5.17E+01	4.00E+01	3.16E+01	2.55E+01	2.10E+01	1.77E+01	1.53E+01	1.35E+01	1.22E+01

1

Part D 1000 year criticality at 2.182 kw/package fission products page 205

decay, following reactor irradiation identified by: power= 1.09E-04mw, burnup=3.795E+01mwd, flux= 2.88E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =88J 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
h 3	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
li 6	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
li 7	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
be 9	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
be 10	8.20E-07	8.17E-07	8.13E-07	8.10E-07	8.06E-07	8.03E-07	7.99E-07	7.96E-07	7.92E-07	7.89E-07	7.85E-07
c 14	1.66E-06	4.95E-07	1.48E-07	4.40E-08	1.31E-08	3.92E-09	1.17E-09	3.48E-10	1.04E-10	3.10E-11	9.23E-12
ni 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 67	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 67	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 68	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 69	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 69m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 69	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 71m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 71m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

ga 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package — fission products — page 206

decay, following reactor irradiation identified by: power= 1.05E-04kw, burnup=3.795E+01mwd, flux= 2.88E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =68J 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
zn 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 77m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 77m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 79	1.14E-01	9.27E-02	7.52E-02	6.09E-02	4.94E-02	4.00E-02	3.24E-02	2.63E-02	2.13E-02	1.73E-02	1.40E-02
se 79m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 79m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

as 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 80m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 81	1.40E-08	1.36E-08	1.31E-08	1.27E-08	1.23E-08	1.19E-08	1.15E-08	1.12E-08	1.08E-08	1.05E-08	1.01E-08
kr 81m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

1

Part D 1000 year criticality at 2.182 kw/package fission products page 207

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.795ZE+01mwd, flux= 2.88E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =88W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
ge 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 82m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 82m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 83m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 85m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

kr 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 86m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 87	6.23E-06	6.23E-06	6.23E-06	6.23E-06	6.23E-06	6.23E-06	6.23E-06	6.23E-06	6.23E-06	6.23E-06	6.23E-06
sr 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 87m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 208

decay, following reactor irradiation identified by: power= 1.03E-04mw, burnup=3.795E+01mwd, flux= 2.88E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =88J 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
br 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	8.00E-15	2.99E-19	1.12E-23	4.19E-28	2.28E-32	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

rb 92	7.92E-12	7.91E-12	7.91E-12	7.91E-12	7.91E-12	7.91E-12	7.91E-12	7.91E-12	7.90E-12	7.90E-12	7.90E-12
se 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 93	3.46E-01	3.45E-01	3.43E-01	3.42E-01	3.40E-01	3.39E-01	3.37E-01	3.36E-01	3.34E-01	3.33E-01	3.31E-01
rb 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 93m	3.46E-01	3.45E-01	3.43E-01	3.42E-01	3.40E-01	3.39E-01	3.37E-01	3.36E-01	3.34E-01	3.33E-01	3.31E-01
br 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 209

decay, following reactor irradiation identified by: power= 1.089E-04mw, burnup=3.795E+01mwd, flux= 2.88E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =88W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
sr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 94	1.40E-05	9.98E-06	7.09E-06	5.04E-06	3.58E-06	2.55E-06	1.81E-06	1.29E-06	9.14E-07	6.50E-07	4.62E-07
rb 94m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 95m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 97m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 98m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc 98	1.19E-06	1.19E-06	1.19E-06	1.19E-06	1.18E-06	1.18E-06	1.18E-06	1.18E-06	1.18E-06	1.17E-06	1.17E-06
rb 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

y 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 99m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc 99	3.65E+00	3.53E+00	3.42E+00	3.31E+00	3.20E+00	3.10E+00	3.00E+00	2.90E+00	2.81E+00	2.72E+00	2.63E+00
tc 99m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 210

decay, following reactor irradiation identified by: power= 1.03E-04mw, burnup=3.795E+01md, flux= 2.88E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =8&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
zr100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb100m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

y105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products * page 211
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.795E+01mwd, flux= 2.85E+08n/cm**2-sec
0 nuclide radioactivity, curies
basis =88W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
y106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd107	2.64E-02	2.63E-02	2.63E-02	2.63E-02	2.63E-02	2.62E-02	2.62E-02	2.62E-02	2.61E-02	2.61E-02	2.61E-02
pd107m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag108	8.95E-29	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag108m	1.03E-27	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

tc110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag110m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 212
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.795E+01mwd, flux= 2.88E+08n/cm**2-sec
0 nuclide radioactivity, curies
basis =88# 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
cd110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd113	1.42E-14	1.42E-14	1.42E-14	1.42E-14	1.42E-14	1.42E-14	1.42E-14	1.42E-14	1.42E-14	1.42E-14	1.42E-14
cd113m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in113m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

ag115m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in115	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12	3.24E-12
in115m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 213

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.752E+01mwd, flux= 2.86E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =8W 15x15, 3.00wt%, 20gcd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
sn115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn119m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

in120m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 214

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.795ZE+01mwd, flux= 2.88E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =88W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
pd121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn121m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb122m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te123	8.7E-14	8.7E-14	8.7E-14	8.7E-14	8.7E-14	8.7E-14	8.7E-14	8.7E-14	8.7E-14	8.7E-14	8.7E-14
te123m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb124m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te125m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

sn126	1.17E-01	1.09E-01	1.02E-01	9.52E-02	8.88E-02	8.29E-02	7.73E-02	7.22E-02	6.73E-02	6.28E-02	5.86E-02

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Part D 1000 year criticality at 2.182 kw/package fission products page: 215

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.795E+01mwd, flux= 2.86E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =88W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
sb126	1.64E-02	1.53E-02	1.43E-02	1.33E-02	1.24E-02	1.16E-02	1.08E-02	1.01E-02	9.43E-03	8.79E-03	8.21E-03
sb126m	1.17E-01	1.09E-01	1.02E-01	9.52E-02	8.88E-02	8.29E-02	7.73E-02	7.22E-02	6.73E-02	6.28E-02	5.86E-02
te126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i129	8.85E-03	8.84E-03	8.84E-03	8.84E-03	8.83E-03	8.83E-03	8.82E-03	8.82E-03	8.82E-03	8.81E-03	8.81E-03
xe129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe129m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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INFORMATION ONLY

Part D 1000 year criticality at 2.182 kw/package fission products page 216
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.795E+01mwd, flux= 2.88E+08n/cm**2-sec
0
nuclide radioactivity, curies
basis =66# 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
cd132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs135	2.04E-01	2.04E-01	2.03E-01	2.03E-01	2.03E-01	2.01E-01	2.01E-01	2.00E-01	1.99E-01	1.99E-01	1.98E-01
cs135m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba136m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 217
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.795E+01mwd, flux= 2.88E+08n/cm**2-sec

INFORMATION ONLY

0 nuclide radioactivity, curies
basis =68U 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
sb137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba137m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la138	5.41E-11	5.41E-11	5.41E-11	5.41E-11	5.41E-11	5.41E-11	5.41E-11	5.41E-11	5.41E-11	5.41E-11	5.41E-11
sb139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce142	7.79E-06	7.79E-06	7.79E-06	7.79E-06	7.79E-06	7.79E-06	7.79E-06	7.79E-06	7.79E-06	7.79E-06	7.79E-06
pr142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr142m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 218
decay, following reactor irradiation identified by: power= 1.05E-04mw, burnup=3.795E+01mwd, flux= 2.88E+08n/cm**2-sec
0 nuclide radioactivity, curies
basis =68U 15x15, 3.00wt%, 20gwd/mtu /per assem

INFORMATION ONLY

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
xe143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd144	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10
i145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm146	6.28E-08	6.28E-08	6.28E-08	6.28E-08	6.28E-08	6.28E-08	6.28E-08	6.28E-08	6.28E-08	6.28E-08	6.28E-08
xe147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm147	2.07E-06	2.07E-06	2.07E-06	2.07E-06	2.07E-06	2.07E-06	2.07E-06	2.07E-06	2.07E-06	2.07E-06	2.07E-06
cs148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 219

decay, following reactor irradiation identified by: power= 1.09E-04mw, burnup=3.795E+01mwd, flux= 2.88E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =88J 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
sm148	8.87E-12	8.87E-12	8.87E-12	8.87E-12	8.87E-12	8.87E-12	8.87E-12	8.87E-12	8.87E-12	8.87E-12	8.87E-12

INFORMATION ONLY

cs149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm149	2.83E-13	2.83E-13	2.83E-13	2.83E-13	2.83E-13	2.83E-13	2.83E-13	2.83E-13	2.83E-13	2.83E-13	2.83E-13
eu149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm151	6.16E-31	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu152m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd152	3.56E-12	3.56E-12	3.56E-12	3.56E-12	3.56E-12	3.56E-12	3.56E-12	3.56E-12	3.56E-12	3.56E-12	3.56E-12
la153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 220

decay, following reactor irradiation identified by: power= 1.03E-04mw, burnup=3.752E+01mwd, flux= 2.88E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =86U 15x15, 3.00w%, 20gcd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
sm154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

la155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 221
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.795E+01mwd, flux= 2.86E+08n/cm**2-sec
0 nuclide radioactivity, curies
basis =68W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
dy161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

tb162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166m	2.21E-09	6.88E-12	2.12E-14	6.58E-17	2.04E-19	6.32E-22	1.96E-24	6.07E-27	1.88E-29	6.85E-32	.00E+00
er166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er167	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er167m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	4.95E+00	4.79E+00	4.64E+00	4.49E+00	4.36E+00	4.23E+00	4.10E+00	3.99E+00	3.87E+00	3.77E+00	3.66E+00

Part E 5000 year criticality at 2.182 kw/package actinides page 145

decay, following reactor irradiation identified by: power= 1.03E-04kw, burnup=1.897E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =8BU 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	2000.0 yr	1000.0 yr	2000.0 yr	3000.0 yr	4000.0 yr	5000.0 yr
he 4	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tl206	1.33E-07	1.33E-07	1.39E-07	1.46E-07	1.53E-07	1.60E-07	1.67E-07
tl207	8.82E-03	8.83E-03	8.97E-03	9.11E-03	9.26E-03	9.40E-03	9.54E-03
tl208	4.07E-04	3.11E-04	2.36E-07	2.17E-07	2.19E-07	2.20E-07	2.21E-07
tl209	3.42E-04	3.43E-04	3.69E-04	3.96E-04	4.23E-04	4.51E-04	4.79E-04
pb206	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb207	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

pb209	1.63E-02	1.63E-02	1.76E-02	1.89E-02	2.03E-02	2.15E-02	2.28E-02
pb210	1.00E-01	1.00E-01	1.08E-01	1.11E-01	1.14E-01	1.21E-01	1.28E-01
pb211	8.85E-03	8.85E-03	8.99E-03	9.14E-03	9.28E-03	9.43E-03	9.57E-03
pb212	1.13E-03	8.67E-04	6.58E-07	6.08E-07	6.08E-07	6.12E-07	6.16E-07
pb214	1.00E-01	1.01E-01	1.08E-01	1.11E-01	1.14E-01	1.21E-01	1.28E-01
bi208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi209	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210	1.00E-01	1.01E-01	1.08E-01	1.11E-01	1.14E-01	1.21E-01	1.28E-01
bi211	8.85E-03	8.85E-03	8.99E-03	9.14E-03	9.28E-03	9.43E-03	9.57E-03
bi212	1.13E-03	8.67E-04	6.58E-07	6.08E-07	6.08E-07	6.12E-07	6.16E-07
bi213	1.63E-02	1.63E-02	1.76E-02	1.89E-02	2.03E-02	2.15E-02	2.28E-02
bi214	1.00E-01	1.01E-01	1.08E-01	1.11E-01	1.14E-01	1.21E-01	1.28E-01
po210	1.00E-01	1.01E-01	1.08E-01	1.11E-01	1.14E-01	1.21E-01	1.28E-01
po211m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
po211	2.43E-05	2.44E-05	2.47E-05	2.51E-05	2.55E-05	2.59E-05	2.63E-05
po212	7.26E-04	5.55E-04	4.22E-07	3.87E-07	3.90E-07	3.93E-07	3.95E-07
po213	1.60E-02	1.60E-02	1.72E-02	1.85E-02	1.97E-02	2.10E-02	2.23E-02
po214	1.00E-01	1.01E-01	1.08E-01	1.11E-01	1.14E-01	1.21E-01	1.28E-01
po215	8.85E-03	8.85E-03	8.99E-03	9.14E-03	9.28E-03	9.43E-03	9.57E-03
po216	1.13E-03	8.67E-04	6.58E-07	6.08E-07	6.08E-07	6.12E-07	6.16E-07
po218	1.00E-01	1.01E-01	1.08E-01	1.11E-01	1.14E-01	1.21E-01	1.28E-01
at217	1.63E-02	1.63E-02	1.76E-02	1.89E-02	2.03E-02	2.15E-02	2.28E-02
rn218	9.09E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rn219	8.85E-03	8.85E-03	8.99E-03	9.14E-03	9.28E-03	9.43E-03	9.57E-03
rn220	1.13E-03	8.67E-04	6.58E-07	6.08E-07	6.08E-07	6.12E-07	6.16E-07
rn222	1.00E-01	1.01E-01	1.08E-01	1.11E-01	1.14E-01	1.21E-01	1.28E-01
fr221	1.63E-02	1.63E-02	1.76E-02	1.89E-02	2.03E-02	2.15E-02	2.28E-02
fr223	1.22E-04	1.22E-04	1.24E-04	1.26E-04	1.28E-04	1.30E-04	1.33E-04
ra222	9.09E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ra223	8.85E-03	8.85E-03	8.99E-03	9.14E-03	9.28E-03	9.43E-03	9.57E-03
ra224	1.13E-03	8.67E-04	6.58E-07	6.08E-07	6.08E-07	6.12E-07	6.16E-07
ra225	1.63E-02	1.63E-02	1.76E-02	1.89E-02	2.03E-02	2.15E-02	2.28E-02
ra226	1.00E-01	1.01E-01	1.08E-01	1.11E-01	1.14E-01	1.21E-01	1.28E-01
ra228	1.15E-07	1.15E-07	1.21E-07	1.28E-07	1.34E-07	1.41E-07	1.48E-07
ac225	1.63E-02	1.63E-02	1.76E-02	1.89E-02	2.03E-02	2.15E-02	2.28E-02
ac227	8.85E-03	8.85E-03	8.99E-03	9.14E-03	9.28E-03	9.43E-03	9.57E-03
ac228	1.15E-07	1.15E-07	1.21E-07	1.28E-07	1.34E-07	1.41E-07	1.48E-07
th226	9.09E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th227	8.73E-03	8.73E-03	8.87E-03	9.01E-03	9.14E-03	9.30E-03	9.44E-03
th228	1.13E-03	8.67E-04	6.58E-07	6.08E-07	6.08E-07	6.12E-07	6.16E-07
th229	1.63E-02	1.63E-02	1.76E-02	1.89E-02	2.03E-02	2.15E-02	2.28E-02
th230	1.12E-01	1.12E-01	1.17E-01	1.23E-01	1.28E-01	1.33E-01	1.38E-01
th231	5.80E-02	1.58E-02	1.59E-02	1.60E-02	1.60E-02	1.61E-02	1.62E-02

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Part E 5000 year criticality at 2.182 kw/package actinides page 146

decay, following reactor irradiation identified by: power= 1.03E-04mw, burnup=1.897E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =68U 15x15, 3.00w%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
th232	1.15E-07	1.15E-07	1.21E-07	1.28E-07	1.34E-07	1.41E-07	1.48E-07
th233	5.33E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th234	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
pa231	8.84E-03	8.85E-03	8.99E-03	9.13E-03	9.28E-03	9.42E-03	9.56E-03
pa232	1.08E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pa233	3.85E-01	3.85E-01	3.85E-01	3.85E-01	3.85E-01	3.85E-01	3.85E-01
pa234m	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
pa234	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04
pa235	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u230	9.09E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

u231	1.62E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u232	1.13E-03	8.43E-04	5.35E-07	4.77E-07	4.74E-07	4.71E-07	4.68E-07
u233	3.06E-02	3.06E-02	3.21E-02	3.36E-02	3.51E-02	3.66E-02	3.81E-02
u234	6.95E-01	6.95E-01	6.94E-01	6.92E-01	6.91E-01	6.89E-01	6.88E-01
u235	1.58E-02	1.58E-02	1.59E-02	1.60E-02	1.60E-02	1.61E-02	1.62E-02
u236	1.31E-01	1.31E-01	1.31E-01	1.32E-01	1.33E-01	1.33E-01	1.33E-01
u237	3.01E+00	1.48E-05	3.15E-08	2.90E-08	2.67E-08	2.46E-08	2.27E-08
u238	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
u239	6.70E+01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u240	1.11E-12	1.11E-12	1.17E-12	1.24E-12	1.30E-12	1.36E-12	1.42E-12
u241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np235	5.50E-07	2.60E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236m	1.06E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236	5.42E-06	5.42E-06	5.39E-06	5.36E-06	5.33E-06	5.29E-06	5.26E-06
np237	3.85E-01	3.85E-01	3.85E-01	3.85E-01	3.85E-01	3.85E-01	3.85E-01
np238	2.97E+00	9.25E-06	7.85E-08	5.76E-10	4.22E-12	3.09E-14	2.27E-16
np239	6.74E+01	4.39E-01	4.01E-01	3.66E-01	3.32E-01	3.02E-01	2.75E-01
np240m	1.11E-12	1.11E-12	1.17E-12	1.24E-12	1.30E-12	1.36E-12	1.42E-12
np240	1.06E-06	1.33E-15	1.41E-15	1.48E-15	1.56E-15	1.65E-15	1.71E-15
np241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu236	5.16E-05	5.22E-07	4.80E-07	4.77E-07	4.74E-07	4.71E-07	4.68E-07
pu237	5.91E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu238	2.98E+00	2.35E+00	1.12E-03	5.19E-07	9.68E-10	6.08E-12	4.39E-14
pu239	9.56E+01	9.56E+01	9.29E+01	9.03E+01	8.78E+01	8.53E+01	8.29E+01
pu240	2.33E+01	2.32E+01	2.10E+01	1.89E+01	1.70E+01	1.53E+01	1.37E+01
pu241	2.63E+00	6.18E-01	1.32E-03	1.21E-03	1.12E-03	1.03E-03	9.50E-04
pu242	2.67E-01	2.67E-01	2.66E-01	2.66E-01	2.66E-01	2.66E-01	2.64E-01
pu243	3.73E-01	2.90E-09	2.90E-09	2.90E-09	2.90E-09	2.90E-09	2.90E-09
pu244	1.11E-12	1.11E-12	1.17E-12	1.24E-12	1.30E-12	1.36E-12	1.43E-12
pu245	1.00E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu246	2.78E-17	2.78E-17	2.66E-17	2.55E-17	2.45E-17	2.35E-17	2.26E-17
am239	2.21E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am240	2.21E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am241	2.67E+00	2.61E+00	5.56E-01	1.13E-01	2.37E-02	5.60E-03	1.90E-03
am242m	2.38E-03	2.05E-03	1.75E-05	1.28E-07	9.37E-10	6.87E-12	5.04E-14
am242	1.46E-02	2.05E-03	1.74E-05	1.27E-07	9.33E-10	6.84E-12	5.01E-14
am243	4.41E-01	4.39E-01	4.01E-01	3.65E-01	3.32E-01	3.02E-01	2.75E-01
am244m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am244	1.59E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am245	1.08E-12	1.64E-24	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am246	2.78E-17	2.78E-17	2.66E-17	2.55E-17	2.45E-17	2.35E-17	2.26E-17
cm241	2.59E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package actinides page 147

decay, following reactor irradiation identified by: power= 1.03E-04mw, burnup=1.897E+03mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =68u 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20080.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
cm242	1.21E-02	1.69E-03	1.44E-05	1.05E-07	7.72E-10	5.66E-12	4.15E-14
cm243	4.74E-09	2.28E-09	1.30E-19	3.54E-30	.00E+00	.00E+00	.00E+00
cm244	1.59E-02	5.05E-03	3.71E-19	.00E+00	.00E+00	.00E+00	.00E+00
cm245	1.43E-03	1.42E-03	1.31E-03	1.21E-03	1.12E-03	1.03E-03	9.48E-04
cm246	7.45E-05	7.42E-05	6.44E-05	5.56E-05	4.80E-05	4.15E-05	3.58E-05
cm247	2.90E-09	2.90E-09	2.90E-09	2.90E-09	2.90E-09	2.90E-09	2.90E-09
cm248	7.99E-09	7.99E-09	7.98E-09	7.96E-09	7.94E-09	7.93E-09	7.91E-09
cm249	2.30E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm250	1.10E-16	1.10E-16	1.06E-16	1.02E-16	9.80E-17	9.41E-17	9.05E-17
cm251	2.70E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk249	2.30E-09	1.13E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk250	3.26E-14	1.54E-17	1.49E-17	1.43E-17	1.37E-17	1.32E-17	1.27E-17

bk251	2.71E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf249	2.24E-09	2.11E-09	3.10E-10	4.29E-11	5.94E-12	8.22E-13	1.14E-13
cf250	2.53E-12	5.14E-13	1.49E-17	1.43E-17	1.37E-17	1.32E-17	1.27E-17
cf251	2.17E-15	2.12E-15	1.00E-15	4.64E-16	2.14E-16	9.91E-17	4.58E-17
cf252	5.42E-17	2.09E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf253	5.06E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf254	2.28E-31	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es253	5.08E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254	6.86E-30	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
s250	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	2.72E+02	1.29E+02	1.19E+02	1.14E+02	1.09E+02	1.05E+02	1.01E+02

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Part E 5000 year criticality at 2.182 kw/package fission products page 165
decay, following reactor irradiation identified by: power= 1.085E-04mw, burnup=1.897E+02mwd, flux= 2.90E+08n/cm**2-sec
0 nuclide radioactivity, curies
basis =88# 15x15, 3.00w%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
h 3	1.05E-02	1.95E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
li 6	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
li 7	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
be 9	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
be 10	8.35E-07	8.35E-07	8.35E-07	8.35E-07	8.34E-07	8.34E-07	8.34E-07
c 14	3.47E-06	3.46E-06	3.07E-06	2.72E-06	2.41E-06	2.14E-06	1.89E-06
ni 66	5.95E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 66	5.98E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 67	7.69E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 67	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 68	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 69	2.58E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 69m	2.09E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 69	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 70	9.52E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 71	1.23E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 71m	5.28E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 71	1.37E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 71m	6.86E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 72	2.01E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 72	1.14E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 72	3.12E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 72	3.98E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 72	3.99E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 73	1.22E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 73	1.32E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 73	7.26E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 73	1.23E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 73	1.25E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73m	1.23E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 74	2.53E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 74	9.25E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

cu 74	9.75E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 74	3.21E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 74	9.86E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 75	5.14E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 75	4.23E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 75	1.32E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 75	7.94E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 75	9.55E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75	9.61E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75m	5.10E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 76	1.69E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 76	1.11E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 166

decay, following reactor irradiation identified by: power= 1.089E-04mw, burnup=1.897E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =88U 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
zn 76	1.88E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 76	2.72E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 76	3.88E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 77	3.76E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 77	6.43E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 77	2.28E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 77	5.54E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 77	2.10E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 77m	5.67E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 77	6.55E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 77m	2.17E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 78	7.45E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 78	2.41E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 78	2.77E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 78	1.18E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 78	1.94E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 78	1.97E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 79	6.07E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 79	1.41E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 79	1.33E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 79	3.50E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 79	3.78E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 79	1.30E-01	1.30E-01	1.27E-01	1.25E-01	1.22E-01	1.20E-01	1.17E-01
se 79m	3.74E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 79m	1.01E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 79	2.53E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 80	6.74E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 80	4.91E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 80	9.67E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 80	9.06E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 80	1.03E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 80	1.14E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 80m	2.87E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

cu 81	6.76E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 81	1.10E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 81	6.29E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 81	9.63E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 81	1.48E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81	1.55E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81m	1.07E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 81	2.24E-08	2.24E-08	2.23E-08	2.23E-08	2.22E-08	2.21E-08	2.20E-08
kr 81m	5.32E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 82	2.66E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 82	4.54E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 167

decay, following reactor irradiation identified by: power= 1.05E-04mw, burnup=1.897E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =8BU 15x15, 3.00wt%, 20gd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
ga 82	9.55E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 82	1.54E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 82m	5.82E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 82	6.00E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 82m	5.11E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 83	1.21E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 83	4.58E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 83	4.14E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 83	2.48E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83	1.80E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83m	1.98E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 83	3.90E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 83m	3.90E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 84	4.93E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 84	2.75E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 84	1.88E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 84	7.21E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84	7.46E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84m	1.88E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 85	7.19E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 85	4.68E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 85	1.08E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85	3.49E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85m	3.07E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 85	8.38E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 85	1.83E-01	2.63E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 85m	8.39E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 86	9.93E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 86	6.27E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 86	8.53E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86	1.04E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86m	1.87E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 86	4.08E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 86m	3.24E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 87	1.05E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

as 87	3.95E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 87	5.07E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 87	1.35E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 87	1.70E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 87	6.33E-06	6.33E-06	6.33E-06	6.33E-06	6.33E-06	6.33E-06	6.33E-06
sr 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 87m	1.21E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 88	1.69E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 88	1.82E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 88	2.67E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 168

decay, following reactor irradiation identified by: power= 1.089E-04mw, burnup=1.897E+02mwd, flux= 2.50E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =68U 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
br 88	1.34E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 88	2.38E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 88	2.44E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 89	2.58E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 89	9.44E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 89	9.17E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 89	3.01E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 89	3.21E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 89	3.23E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89m	3.02E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 90	2.39E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 90	2.06E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 90	4.85E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 90	3.25E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90	2.95E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90m	9.01E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 90	3.90E+00	1.86E+00	7.87E-11	1.59E-21	2.28E-32	.00E+00	.00E+00
y 90	3.91E+00	1.86E+00	7.87E-11	1.59E-21	2.28E-32	.00E+00	.00E+00
y 90m	7.27E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 91	1.97E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 91	1.66E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 91	2.24E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	3.85E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 91	4.08E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91	4.08E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91m	2.37E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	1.48E-10	1.43E-10	5.33E-11	1.99E-11	6.94E-12	2.50E-12	9.03E-13
se 92	1.57E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 92	2.79E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 92	1.18E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 92	3.36E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 92	4.22E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 92	4.26E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 92	2.80E-11	2.80E-11	2.80E-11	2.80E-11	2.80E-11	2.80E-11	2.80E-11
se 93	1.11E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 93	5.43E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 93	4.00E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 93	2.67E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

sr 93	4.63E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 93	3.14E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 93	3.53E-01	3.53E-01	3.53E-01	3.52E-01	3.52E-01	3.52E-01	3.52E-01
nb 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 93m	3.53E-01	3.53E-01	3.53E-01	3.52E-01	3.52E-01	3.52E-01	3.52E-01
kr 94	3.44E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 94	1.79E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 94	1.36E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 169

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.897E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =66W 15x15, 3.00w%, 20gwd/mtu /per assem

	initial	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sr 94	4.54E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 94	4.88E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 94	4.15E-05	4.14E-05	4.01E-05	3.87E-05	3.74E-05	3.62E-05	3.49E-05
nb 94m	2.14E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 95	3.83E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 95	1.44E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 95	6.50E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 95	4.06E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 95	4.99E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 95	5.07E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 95	5.06E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 95m	5.63E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 96	8.56E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 96	2.61E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 96	1.64E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 96	2.96E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 96	4.76E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 96	1.22E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 97	3.38E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 97	4.94E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 97	1.52E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 97	3.88E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 97	4.70E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 97	4.72E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 97m	4.46E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 98	1.20E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 98	4.06E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 98	6.06E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 98	2.87E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 98	4.91E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 98	4.95E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 98m	3.25E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc 98	1.23E-06	1.23E-06	1.23E-06	1.23E-06	1.23E-06	1.23E-06	1.23E-06
nb 99	1.20E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 99	2.59E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 99	1.83E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 99	4.78E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 99	3.09E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 99m	2.11E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 99	5.27E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

tc 99	3.77E+00	3.77E+00	3.75E+00	3.74E+00	3.73E+00	3.72E+00	3.71E+00
tc 99m	4.64E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb100	3.62E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr100	2.81E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y100	5.32E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page: 170

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.897E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =68J 15x15, 3.00wt%, 20g-cd/stu /per assem

	initial	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
zr100	4.80E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb100	5.14E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb100m	3.39E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc100	8.22E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb101	2.98E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr101	4.52E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y101	3.06E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr101	2.68E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb101	4.44E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo101	4.65E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc101	4.65E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr102	8.38E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y102	1.61E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr102	1.93E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb102	3.68E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo102	4.21E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102	4.22E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102m	3.82E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh102	1.35E-05	1.07E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr103	5.79E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y103	4.94E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr103	6.60E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb103	2.51E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo103	3.76E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc103	3.83E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru103	3.85E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103m	3.84E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr104	1.81E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y104	9.59E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr104	1.78E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb104	1.08E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo104	2.70E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc104	2.84E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104	2.12E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104m	1.55E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y105	1.21E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr105	6.66E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb105	3.97E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo105	1.84E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc105	2.16E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

ru105	2.18E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105	2.18E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105m	6.20E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 171

decay, following reactor irradiation identified by: power= 1.039E-04kw, burnup=1.897E+03mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =8&W 15x15, 3.00wt%, 20gcd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
y106	2.16E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr106	2.10E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb106	5.76E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo106	8.82E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc106	1.34E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru106	1.46E+00	1.98E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106	1.49E+00	1.98E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106m	6.55E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag106	2.18E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y107	1.97E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr107	2.06E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb107	9.33E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo107	3.12E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc107	8.25E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru107	1.02E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh107	1.02E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd107	2.68E-02	2.68E-02	2.68E-02	2.68E-02	2.68E-02	2.68E-02	2.68E-02
pd107m	8.24E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr108	8.52E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb108	2.71E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo108	3.60E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc108	2.43E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru108	6.08E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108	6.20E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108m	1.19E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag108	2.35E-04	1.70E-07	8.54E-10	3.64E-12	1.55E-14	6.61E-17	2.82E-19
ag108m	2.30E-06	1.96E-06	9.82E-09	4.18E-11	1.78E-13	7.60E-16	3.24E-18
cd108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr109	6.88E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb109	1.19E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo109	3.81E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc109	8.18E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru109	4.31E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109	5.13E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109m	2.56E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109	6.01E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109m	3.37E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109m	6.01E-01	1.74E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd109	2.35E-08	1.74E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb110	5.44E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo110	4.30E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc110	1.08E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru110	1.23E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110	2.53E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110m	1.49E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

ag110	3.03E-01	1.01E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag110m	1.20E-02	7.41E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 172

decay, following reactor irradiation identified by: power= 1.089E-04mw, burnup=1.897E+03mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =88J 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
cd110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb111	4.97E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr111	4.67E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y111	2.21E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr111	3.96E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh111	8.63E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111	9.32E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111m	4.99E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111	9.40E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111m	9.36E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111m	1.39E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb112	1.88E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr112	7.70E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y112	4.50E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr112	1.47E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh112	3.72E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd112	4.70E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag112	4.71E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr113	1.60E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y113	1.25E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr113	5.13E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh113	1.88E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd113	2.87E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113	2.79E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113m	5.62E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd113	1.08E-14	1.08E-14	1.08E-14	1.08E-14	1.08E-14	1.08E-14	1.08E-14
cd113m	6.61E-04	1.51E-04	2.98E-25	.00E+00	.00E+00	.00E+00	.00E+00
in113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in113m	3.11E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr114	8.22E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y114	2.15E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr114	2.16E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh114	1.08E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd114	2.48E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag114	2.58E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114	7.45E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114m	5.61E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr115	3.69E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y115	7.99E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr115	5.39E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh115	4.66E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd115	1.59E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115	1.25E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115m	5.24E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115	1.77E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115m	8.30E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in115	3.25E-12	3.25E-12	3.25E-12	3.25E-12	3.25E-12	3.25E-12	3.25E-12
in115m	1.77E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 173

decay, following reactor irradiation identified by: power= 1.09E-04mw, burnup=1.87E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =68U 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sn115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc116	3.43E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru116	1.91E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh116	2.60E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd116	1.92E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116	2.18E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116m	2.54E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116	3.56E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116m	1.34E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc117	4.24E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru117	2.99E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh117	9.97E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd117	1.25E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117	1.06E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117m	1.06E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117	1.86E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117m	4.19E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117	1.38E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117m	1.70E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117m	1.11E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc118	1.26E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru118	4.88E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh118	2.40E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd118	6.08E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118	1.04E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118m	7.35E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd118	1.79E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118	1.79E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118m	2.08E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru119	6.46E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh119	9.35E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd119	3.66E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag119	1.27E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119	1.30E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119m	5.83E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119	7.58E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119m	1.17E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn119m	1.48E-04	8.19E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru120	8.07E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh120	2.00E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd120	1.85E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag120	8.18E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd120	1.78E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120	1.80E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120m	2.90E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh121	5.66E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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decay, following reactor irradiation identified by: power= 1.03E-04mw, burnup=1.897E+02mwd, flux= 2.90E+08n/cm**2-sec
0 nuclide radioactivity, curies
basis =88J 15x15, 3.00wt%, 20g-cj/mtu /per assem

	initial	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
pd121	8.05E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag121	6.00E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd121	1.80E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121	1.60E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121m	1.83E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn121	1.97E-02	1.10E-04	5.40E-10	1.82E-15	6.13E-21	2.06E-26	6.85E-32
sn121m	2.07E-04	1.42E-04	6.96E-10	2.34E-15	7.90E-21	2.66E-26	9.13E-32
sb121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh122	6.26E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd122	2.67E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag122	3.11E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd122	1.94E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122	2.14E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122m	2.04E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb122	1.98E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb122m	1.98E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh123	5.34E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd123	4.67E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag123	1.25E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd123	1.24E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123	1.58E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123m	4.24E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123	1.81E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123m	2.07E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te123	9.00E-14	9.00E-14	9.00E-14	9.00E-14	9.00E-14	9.00E-14	9.00E-14
te123m	1.26E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd124	2.56E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag124	9.91E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd124	1.99E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in124	3.58E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb124	1.56E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb124m	3.20E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd125	6.28E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag125	4.79E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd125	1.29E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125	2.04E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125m	1.52E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125	1.17E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125m	3.60E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb125	4.78E-02	2.36E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te125m	1.10E-02	5.78E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd126	1.39E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag126	1.95E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd126	1.44E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in126	4.54E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn126	1.24E-01	1.24E-01	1.23E-01	1.22E-01	1.21E-01	1.20E-01	1.20E-01

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decay, following reactor irradiation identified by: power= 1.03E-04mw, burnup=1.897E+02mwd, flux= 2.90E+08n/cm**2-sec
0 nuclide radioactivity, curies

basis =8&W 15x15, 3.00w/o, 20g-cd/mtu /per assem

	initial	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sb126	1.79E-02	1.73E-02	1.72E-02	1.71E-02	1.70E-02	1.69E-02	1.67E-02
sb126m	1.25E-01	1.24E-01	1.23E-01	1.22E-01	1.21E-01	1.20E-01	1.20E-01
te126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag127	1.06E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd127	1.08E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127	4.15E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127m	4.15E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127	7.98E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127m	1.09E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb127	2.00E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127	1.99E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127m	3.50E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe127	6.90E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag128	5.40E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd128	1.13E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in128	8.69E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn128	3.70E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128	3.62E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128m	3.88E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i128	1.76E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd129	5.57E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in129	9.99E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129	3.22E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129m	3.43E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb129	8.40E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129	7.96E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129m	1.60E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i129	8.99E-03	8.99E-03	8.99E-03	8.99E-03	8.99E-03	8.99E-03	8.99E-03
xe129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe129m	3.98E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd130	2.11E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in130	7.98E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn130	9.59E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130	2.77E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130m	1.27E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130	4.23E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130m	2.25E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd131	3.21E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in131	3.28E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn131	8.03E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb131	2.23E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131	2.35E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131m	4.94E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i131	2.74E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131m	3.07E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 176

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.897&E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =8&W 15x15, 3.00w/o, 20g-cd/mtu /per assem

	initial	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr

cs132	3.95E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in132	8.90E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn132	6.44E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132	1.26E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132m	1.32E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te132	3.97E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i132	4.03E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs132	9.28E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in133	2.67E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn133	1.82E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb133	1.91E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133	3.20E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133m	2.63E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133	5.80E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133m	4.13E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133	5.82E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133m	1.75E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba133	4.94E-10	6.84E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in134	4.45E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn134	2.98E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134	3.60E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134m	2.44E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te134	5.38E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134	6.52E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134m	4.84E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134m	1.01E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134	1.10E+00	4.60E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134m	8.38E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn135	2.55E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb135	1.54E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te135	2.77E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i135	5.47E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135	5.90E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135m	1.14E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs135	2.12E-01	2.12E-01	2.12E-01	2.11E-01	2.11E-01	2.11E-01	2.11E-01
cs135m	1.85E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135m	1.34E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn136	2.26E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb136	2.40E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te136	1.29E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136	2.61E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136m	1.24E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs136	1.47E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba136m	1.64E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 177

decay, following reactor irradiation identified by: power= 1.035E-04mw, burnup=1.897E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =BW 15x15, 3.00wt%, 20gcd/mtu /per assem

initial20030.0 yr21000.0 yr22000.0 yr23000.0 yr24000.0 yr25000.0 yr

sb137	3.11E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te137	4.31E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

i137	2.72E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe137	5.24E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs137	5.50E+00	2.75E+00	5.07E-10	4.67E-20	4.31E-30	.00E+00	.00E+00
ba137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba137m	5.19E+00	2.59E+00	4.78E-10	4.41E-20	4.06E-30	.00E+00	.00E+00
sb138	3.28E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te138	1.01E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i138	1.36E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe138	5.08E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138	5.44E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138m	2.00E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la138	5.51E-11	5.51E-11	5.51E-11	5.51E-11	5.51E-11	5.51E-11	5.51E-11
sb139	2.53E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te139	1.61E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i139	7.34E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe139	3.90E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs139	5.12E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba139	5.24E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce139	3.18E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr139	1.70E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te140	2.44E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i140	1.73E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe140	2.77E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs140	4.62E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba140	5.19E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la140	5.29E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr140	5.91E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te141	2.81E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i141	2.25E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe141	1.05E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs141	3.56E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba141	4.77E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la141	4.81E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce141	4.82E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd141	7.58E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te142	1.02E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i142	5.33E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe142	4.11E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs142	2.08E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba142	4.59E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la142	4.73E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce142	7.92E-06	7.92E-06	7.92E-06	7.92E-06	7.92E-06	7.92E-06	7.92E-06
pr142	1.22E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr142m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i143	7.32E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

1

Part E 5000 year criticality at 2.182 kw/package fission products page 178

decay, following reactor irradiation identified by: power= 1.03E-04mw, burnup=1.897E+03mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =8BU 15x15, 3.00wt%, 20g-cd/stu /per assem

	initial	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
xe143	6.01E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs143	1.10E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba143	4.01E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la143	4.58E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

ce143	4.62E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr143	4.62E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i144	2.93E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe144	1.27E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs144	3.06E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba144	3.22E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la144	4.10E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce144	4.19E+00	1.11E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144	4.19E+00	1.11E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144m	5.88E-02	1.55E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd144	4.16E-10	4.16E-10	4.16E-10	4.16E-10	4.16E-10	4.16E-10	4.16E-10
i145	9.24E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe145	1.23E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs145	7.20E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba145	1.41E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la145	2.81E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce145	3.11E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr145	3.11E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm145	2.04E-05	6.63E-06	2.11E-22	.00E+00	.00E+00	.00E+00	.00E+00
sm145	2.00E-05	3.98E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe146	1.14E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs146	1.74E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba146	7.58E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la146	1.85E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce146	2.44E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr146	2.45E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm146	4.11E-07	9.55E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm146	6.88E-08	6.88E-08	6.88E-08	6.88E-08	6.88E-08	6.88E-08	6.88E-08
xe147	3.59E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs147	3.52E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba147	1.15E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la147	7.66E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce147	1.81E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr147	1.90E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd147	1.91E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm147	1.91E+00	6.98E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm147	2.10E-06	2.10E-06	2.10E-06	2.10E-06	2.10E-06	2.10E-06	2.10E-06
cs148	6.42E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba148	2.24E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la148	2.37E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce148	1.27E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr148	1.44E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148	2.16E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148m	2.20E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 179

decay, following reactor irradiation identified by: power= 1.03E-04mw, burnup=1.897E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =68W 15x15, 3.00wt%, 20gcd/mtu /per assem

	initial	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sm148	9.08E-12	9.08E-12	9.08E-12	9.08E-12	9.08E-12	9.08E-12	9.08E-12
cs149	5.32E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba149	2.47E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la149	6.61E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce149	6.46E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr149	9.63E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

nd149	1.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm149	1.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm149	1.89E-13	1.89E-13	1.89E-13	1.89E-13	1.89E-13	1.89E-13	1.89E-13
eu149	1.62E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs150	6.80E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba150	2.23E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la150	1.06E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce150	2.75E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr150	5.72E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm150	3.11E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu150	1.99E-06	1.12E-06	7.80E-15	3.05E-23	1.14E-31	.00E+00	.00E+00
ba151	2.26E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la151	1.79E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce151	7.55E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr151	2.88E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd151	4.78E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm151	4.85E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm151	8.00E-01	6.35E-01	3.61E-04	1.63E-07	7.36E-11	3.33E-14	1.50E-17
eu151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba152	4.86E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la152	1.47E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce152	7.09E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr152	8.54E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd152	3.07E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152	3.18E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152m	1.06E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu152	6.47E-01	1.36E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu152m	3.51E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd152	1.48E-11	1.48E-11	1.48E-11	1.48E-11	1.48E-11	1.48E-11	1.48E-11
la153	1.48E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce153	3.55E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr153	3.77E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd153	1.72E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm153	2.07E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm153	9.61E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd153	2.00E-03	4.46E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la154	3.88E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce154	3.58E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr154	6.52E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd154	7.72E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154	9.74E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154m	2.00E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 180

decay, following reactor irradiation identified by: power= 1.03E-04mw, burnup=1.897E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =68# 15x15, 3.00w%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sm154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu154	4.84E-01	4.30E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la155	1.98E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce155	3.16E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr155	1.45E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd155	2.52E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm155	5.82E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

sm155	7.19E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu155	7.21E-02	8.47E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce156	2.47E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr156	1.95E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd156	7.96E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm156	2.63E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm156	4.16E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu156	4.20E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce157	1.19E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr157	3.12E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd157	1.88E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm157	1.08E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm157	2.38E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu157	2.49E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr158	1.67E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd158	3.16E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm158	2.43E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm158	1.14E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu158	1.31E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr159	7.21E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd159	2.90E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm159	4.88E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm159	4.14E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu159	6.18E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd159	8.00E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd160	1.92E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm160	5.40E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm160	1.18E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu160	2.51E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb160	1.84E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd161	7.98E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm161	6.59E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm161	2.25E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu161	9.20E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd161	1.38E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb161	1.39E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

1

Part E 5000 year criticality at 2,182 kw/package fission products page 181

decay, following reactor irradiation identified by: power= 1.03E-04mw, burnup=1.897E+03mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =68W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
dy161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm162	4.47E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm162	3.73E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu162	2.44E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd162	6.29E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162	6.42E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162m	1.33E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm163	2.89E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu163	4.57E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

gd163	2.21E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163	2.59E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm164	2.17E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu164	5.24E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd164	6.55E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb164	9.48E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm165	1.14E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu165	5.75E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd165	1.40E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb165	3.29E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165	4.33E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165m	3.27E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy166	5.99E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166	6.32E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166m	8.91E-07	8.75E-07	5.00E-07	2.81E-07	1.57E-07	8.84E-08	4.96E-08
er166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er167	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er167m	1.98E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er169	1.03E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170	6.47E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er171	1.39E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm171	1.42E-08	2.82E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er172	8.22E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm172	8.66E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	5.31E+02	1.50E+01	5.10E+00	5.08E+00	5.06E+00	5.05E+00	5.03E+00

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Part E 5000 year criticality at 2.182 kw/package actinides page 185
decay, following reactor irradiation identified by: power= 1.08E-04kw, burnup=1.897E+03wd, flux= 2.90E+08n/cm**2-sec
0 nuclide radioactivity, curies
basis =88J 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial 35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
he 4	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tl206	1.67E-07	2.31E-07	2.88E-07	3.39E-07	3.83E-07	4.22E-07	4.56E-07	4.85E-07	5.11E-07	5.33E-07	5.52E-07
tl207	9.54E-03	1.09E-02	1.21E-02	1.31E-02	1.41E-02	1.49E-02	1.55E-02	1.61E-02	1.66E-02	1.70E-02	1.74E-02
tl208	2.21E-07	2.35E-07	2.50E-07	2.66E-07	2.82E-07	2.99E-07	3.16E-07	3.33E-07	3.51E-07	3.69E-07	3.88E-07
tl209	4.79E-04	7.72E-04	1.07E-03	1.36E-03	1.64E-03	1.91E-03	2.17E-03	2.42E-03	2.65E-03	2.87E-03	3.09E-03
pb206	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb207	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb209	2.28E-02	3.68E-02	5.09E-02	6.48E-02	7.82E-02	9.10E-02	1.03E-01	1.15E-01	1.26E-01	1.37E-01	1.47E-01
pb210	1.28E-01	1.75E-01	2.18E-01	2.57E-01	2.90E-01	3.20E-01	3.46E-01	3.68E-01	3.87E-01	4.04E-01	4.18E-01
pb211	9.57E-03	1.09E-02	1.21E-02	1.32E-02	1.41E-02	1.49E-02	1.56E-02	1.62E-02	1.66E-02	1.71E-02	1.74E-02
pb212	6.16E-07	6.55E-07	6.97E-07	7.40E-07	7.85E-07	8.31E-07	8.78E-07	9.27E-07	9.76E-07	1.03E-06	1.08E-06
pb214	1.28E-01	1.75E-01	2.18E-01	2.57E-01	2.90E-01	3.20E-01	3.46E-01	3.68E-01	3.87E-01	4.04E-01	4.18E-01
bi208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

bi209	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210	1.26E-01	1.75E-01	2.18E-01	2.57E-01	2.90E-01	3.20E-01	3.46E-01	3.68E-01	3.87E-01	4.04E-01	4.18E-01	
bi211	9.57E-03	1.09E-02	1.21E-02	1.32E-02	1.41E-02	1.49E-02	1.56E-02	1.62E-02	1.66E-02	1.71E-02	1.74E-02	
bi212	6.16E-07	6.55E-07	6.97E-07	7.40E-07	7.85E-07	8.31E-07	8.78E-07	9.27E-07	9.76E-07	1.03E-06	1.08E-06	
bi213	2.28E-02	3.68E-02	5.09E-02	6.48E-02	7.82E-02	9.10E-02	1.03E-01	1.15E-01	1.26E-01	1.37E-01	1.47E-01	
bi214	1.26E-01	1.75E-01	2.18E-01	2.57E-01	2.90E-01	3.20E-01	3.46E-01	3.68E-01	3.87E-01	4.04E-01	4.18E-01	
po210	1.26E-01	1.75E-01	2.18E-01	2.57E-01	2.90E-01	3.20E-01	3.46E-01	3.68E-01	3.87E-01	4.04E-01	4.18E-01	
po211m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
po211	2.63E-05	3.00E-05	3.33E-05	3.62E-05	3.88E-05	4.10E-05	4.28E-05	4.44E-05	4.58E-05	4.69E-05	4.79E-05	
po212	3.95E-07	4.20E-07	4.44E-07	4.74E-07	5.03E-07	5.32E-07	5.63E-07	5.94E-07	6.25E-07	6.58E-07	6.91E-07	
po213	2.23E-02	3.60E-02	4.99E-02	6.35E-02	7.66E-02	8.91E-02	1.01E-01	1.13E-01	1.24E-01	1.34E-01	1.44E-01	
po214	1.26E-01	1.75E-01	2.18E-01	2.57E-01	2.90E-01	3.20E-01	3.46E-01	3.68E-01	3.87E-01	4.04E-01	4.18E-01	
po215	9.57E-03	1.09E-02	1.21E-02	1.32E-02	1.41E-02	1.49E-02	1.56E-02	1.62E-02	1.66E-02	1.71E-02	1.74E-02	
po216	6.16E-07	6.55E-07	6.97E-07	7.40E-07	7.85E-07	8.31E-07	8.78E-07	9.27E-07	9.76E-07	1.03E-06	1.08E-06	
po218	1.26E-01	1.75E-01	2.19E-01	2.57E-01	2.91E-01	3.20E-01	3.46E-01	3.68E-01	3.87E-01	4.04E-01	4.18E-01	
at217	2.28E-02	3.68E-02	5.09E-02	6.48E-02	7.82E-02	9.11E-02	1.03E-01	1.15E-01	1.26E-01	1.37E-01	1.47E-01	
rn218	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
rn219	9.57E-03	1.09E-02	1.21E-02	1.32E-02	1.41E-02	1.49E-02	1.56E-02	1.62E-02	1.66E-02	1.71E-02	1.74E-02	
rn220	6.16E-07	6.55E-07	6.97E-07	7.40E-07	7.85E-07	8.31E-07	8.78E-07	9.27E-07	9.76E-07	1.03E-06	1.08E-06	
rn222	1.26E-01	1.75E-01	2.19E-01	2.57E-01	2.91E-01	3.20E-01	3.46E-01	3.68E-01	3.87E-01	4.04E-01	4.18E-01	
fr221	2.28E-02	3.68E-02	5.09E-02	6.48E-02	7.82E-02	9.11E-02	1.03E-01	1.15E-01	1.26E-01	1.37E-01	1.47E-01	
fr223	1.33E-04	1.51E-04	1.67E-04	1.82E-04	1.95E-04	2.06E-04	2.15E-04	2.23E-04	2.30E-04	2.35E-04	2.40E-04	
ra222	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
ra223	9.57E-03	1.09E-02	1.21E-02	1.32E-02	1.41E-02	1.49E-02	1.56E-02	1.62E-02	1.66E-02	1.71E-02	1.74E-02	
ra224	6.16E-07	6.55E-07	6.97E-07	7.40E-07	7.85E-07	8.31E-07	8.78E-07	9.27E-07	9.76E-07	1.03E-06	1.08E-06	
ra225	2.28E-02	3.68E-02	5.09E-02	6.48E-02	7.82E-02	9.11E-02	1.03E-01	1.15E-01	1.26E-01	1.37E-01	1.47E-01	
ra226	1.26E-01	1.75E-01	2.19E-01	2.57E-01	2.91E-01	3.20E-01	3.46E-01	3.68E-01	3.87E-01	4.04E-01	4.18E-01	
ra228	1.48E-07	2.14E-07	2.82E-07	3.49E-07	4.17E-07	4.84E-07	5.52E-07	6.20E-07	6.87E-07	7.55E-07	8.22E-07	
ac225	2.28E-02	3.68E-02	5.09E-02	6.48E-02	7.82E-02	9.11E-02	1.03E-01	1.15E-01	1.26E-01	1.37E-01	1.47E-01	
ac227	9.57E-03	1.09E-02	1.21E-02	1.32E-02	1.41E-02	1.49E-02	1.56E-02	1.62E-02	1.66E-02	1.71E-02	1.74E-02	
ac228	1.48E-07	2.14E-07	2.82E-07	3.49E-07	4.17E-07	4.84E-07	5.52E-07	6.20E-07	6.87E-07	7.55E-07	8.22E-07	
th226	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	
th227	9.44E-03	1.08E-02	1.19E-02	1.30E-02	1.39E-02	1.47E-02	1.54E-02	1.59E-02	1.64E-02	1.68E-02	1.72E-02	
th228	6.16E-07	6.55E-07	6.97E-07	7.40E-07	7.85E-07	8.31E-07	8.78E-07	9.27E-07	9.76E-07	1.03E-06	1.08E-06	
th229	2.28E-02	3.68E-02	5.09E-02	6.48E-02	7.82E-02	9.11E-02	1.03E-01	1.15E-01	1.26E-01	1.37E-01	1.47E-01	
th230	1.33E-01	1.86E-01	2.28E-01	2.65E-01	2.98E-01	3.26E-01	3.51E-01	3.73E-01	3.92E-01	4.08E-01	4.21E-01	
th231	1.62E-02	1.69E-02	1.75E-02	1.79E-02	1.81E-02	1.84E-02	1.85E-02	1.87E-02	1.88E-02	1.88E-02	1.89E-02	

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Part E 5000 year criticality at 2.182 kw/package actinides page 186
decay, following reactor irradiation identified by: power= 1.035E-04mw, burnup=1.887E+02mwd, flux= 2.90E+08n/cm**2-sec
0 nuclide radioactivity, curies
basis =68# 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
th232	1.48E-07	2.14E-07	2.82E-07	3.49E-07	4.17E-07	4.84E-07	5.52E-07	6.20E-07	6.87E-07	7.55E-07	8.22E-07
th233	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th234	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
pa231	9.56E-03	1.09E-02	1.21E-02	1.32E-02	1.41E-02	1.49E-02	1.56E-02	1.61E-02	1.66E-02	1.71E-02	1.74E-02
pa232	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pa233	3.85E-01	3.83E-01	3.82E-01	3.81E-01	3.80E-01	3.79E-01	3.77E-01	3.76E-01	3.75E-01	3.74E-01	3.72E-01
pa234m	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
pa234	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04
pa235	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u230	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u231	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u232	4.68E-07	4.41E-07	4.15E-07	3.91E-07	3.68E-07	3.46E-07	3.26E-07	3.07E-07	2.89E-07	2.72E-07	2.56E-07
u233	3.81E-02	5.25E-02	6.69E-02	8.04E-02	9.31E-02	1.05E-01	1.17E-01	1.28E-01	1.39E-01	1.49E-01	1.58E-01
u234	6.88E-01	6.73E-01	6.58E-01	6.44E-01	6.30E-01	6.17E-01	6.04E-01	5.91E-01	5.79E-01	5.67E-01	5.55E-01
u235	1.62E-02	1.69E-02	1.75E-02	1.79E-02	1.81E-02	1.84E-02	1.85E-02	1.87E-02	1.88E-02	1.88E-02	1.89E-02
u236	1.33E-01	1.36E-01	1.37E-01	1.37E-01	1.37E-01	1.37E-01	1.37E-01	1.37E-01	1.37E-01	1.37E-01	1.37E-01

INFORMATION ONLY

u237	2.27E-08	1.00E-08	4.44E-09	1.97E-09	8.69E-10	3.85E-10	1.70E-10	7.52E-11	3.33E-11	1.47E-11	6.51E-12
u238	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
u239	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u240	1.42E-12	2.08E-12	2.66E-12	3.25E-12	3.84E-12	4.41E-12	4.97E-12	5.52E-12	6.06E-12	6.59E-12	7.10E-12
u241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np235	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236	5.26E-06	4.95E-06	4.66E-06	4.35E-06	4.13E-06	3.89E-06	3.66E-06	3.45E-06	3.25E-06	3.06E-06	2.88E-06
np237	3.88E-01	3.83E-01	3.82E-01	3.81E-01	3.80E-01	3.79E-01	3.77E-01	3.76E-01	3.75E-01	3.74E-01	3.72E-01
np238	2.27E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np239	2.75E-01	1.08E-01	4.20E-02	1.64E-02	6.40E-03	2.50E-03	9.75E-04	3.81E-04	1.49E-04	5.81E-05	2.27E-05
np240m	1.42E-12	2.08E-12	2.66E-12	3.25E-12	3.84E-12	4.41E-12	4.97E-12	5.52E-12	6.06E-12	6.59E-12	7.10E-12
np240	1.71E-15	2.46E-15	3.19E-15	3.90E-15	4.60E-15	5.29E-15	5.96E-15	6.62E-15	7.27E-15	7.90E-15	8.52E-15
np241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu236	4.68E-07	4.41E-07	4.15E-07	3.91E-07	3.68E-07	3.46E-07	3.26E-07	3.07E-07	2.89E-07	2.72E-07	2.56E-07
pu237	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu238	4.39E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu239	8.29E+01	6.22E+01	4.67E+01	3.50E+01	2.63E+01	1.97E+01	1.48E+01	1.11E+01	8.32E+00	6.24E+00	4.68E+00
pu240	1.37E+01	4.78E+00	1.66E+00	5.78E-01	2.01E-01	6.95E-02	2.43E-02	8.45E-03	2.94E-03	1.02E-03	3.55E-04
pu241	9.50E-04	4.20E-04	1.85E-04	8.22E-05	3.64E-05	1.61E-05	7.12E-06	3.15E-06	1.39E-06	6.16E-07	2.72E-07
pu242	2.64E-01	2.59E-01	2.55E-01	2.50E-01	2.45E-01	2.41E-01	2.36E-01	2.32E-01	2.28E-01	2.24E-01	2.19E-01
pu243	2.90E-09	2.86E-09	2.82E-09	2.78E-09	2.75E-09	2.71E-09	2.67E-09	2.63E-09	2.59E-09	2.55E-09	2.51E-09
pu244	1.43E-12	2.08E-12	2.66E-12	3.26E-12	3.84E-12	4.41E-12	4.98E-12	5.53E-12	6.07E-12	6.59E-12	7.11E-12
pu245	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu246	2.26E-17	1.52E-17	1.02E-17	6.84E-18	4.60E-18	3.09E-18	2.07E-18	1.39E-18	9.34E-19	6.27E-19	4.21E-19
am239	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am240	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am241	1.90E-03	4.20E-04	1.85E-04	8.22E-05	3.64E-05	1.61E-05	7.12E-06	3.15E-06	1.39E-06	6.16E-07	2.72E-07
am242m	5.04E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am242	5.01E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am243	2.75E-01	1.08E-01	4.20E-02	1.64E-02	6.40E-03	2.50E-03	9.75E-04	3.81E-04	1.49E-04	5.81E-05	2.27E-05
am244m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am244	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am245	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am246	2.26E-17	1.52E-17	1.02E-17	6.84E-18	4.60E-18	3.09E-18	2.07E-18	1.39E-18	9.34E-19	6.27E-19	4.21E-19
cm241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

1

Part E 5000 year criticality at 2.182 kw/package actinides page 187

decay, following reactor irradiation identified by: power= 1.03E-04mw, burnup=1.897E+03mwd, flux= 2.90E+08n/cm**2-sec

0 - nuclide radioactivity, curies

basis =8DU 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
cm242	4.15E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm243	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm244	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm245	9.48E-04	4.20E-04	1.85E-04	8.21E-05	3.63E-05	1.61E-05	7.11E-06	3.14E-06	1.39E-06	6.15E-07	2.72E-07
cm246	3.58E-05	8.28E-06	1.91E-06	4.42E-07	1.02E-07	2.36E-08	5.45E-09	1.26E-09	2.91E-10	6.72E-11	1.55E-11
cm247	2.90E-09	2.88E-09	2.88E-09	2.88E-09	2.88E-09	2.88E-09	2.88E-09	2.88E-09	2.88E-09	2.88E-09	2.88E-09
cm248	7.91E-09	7.75E-09	7.60E-09	7.44E-09	7.29E-09	7.15E-09	7.00E-09	6.86E-09	6.72E-09	6.59E-09	6.45E-09
cm249	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm250	9.08E-17	6.07E-17	4.08E-17	2.74E-17	1.84E-17	1.23E-17	8.25E-18	5.56E-18	3.73E-18	2.51E-18	1.68E-18
cm251	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk249	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk250	1.27E-17	8.50E-18	5.71E-18	3.83E-18	2.57E-18	1.73E-18	1.16E-18	7.79E-19	5.23E-19	3.51E-19	2.36E-19
bk251	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf249	1.14E-13	2.92E-22	7.53E-31	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf250	1.27E-17	8.50E-18	5.71E-18	3.83E-18	2.57E-18	1.73E-18	1.16E-18	7.79E-19	5.23E-19	3.51E-19	2.36E-19
cf251	4.58E-17	2.08E-20	9.04E-24	4.01E-27	1.78E-30	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf252	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf253	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

cf254	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es253	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
s250	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	1.01E+02	7.17E+01	5.35E+01	4.12E+01	3.25E+01	2.62E+01	2.16E+01	1.82E+01	1.57E+01	1.38E+01	1.25E+01

1

Part E 5000 year criticality at 2.182 kw/package fission products page 205

decay, following reactor irradiation identified by: power= 1.09E-04mw, burnup=1.897E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =BW 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
h 3	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
li 6	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
li 7	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
be 9	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
be 10	8.34E-07	8.30E-07	8.26E-07	8.23E-07	8.19E-07	8.16E-07	8.12E-07	8.09E-07	8.05E-07	8.02E-07	7.98E-07
c 14	1.85E-06	5.65E-07	1.68E-07	5.02E-08	1.50E-08	4.47E-09	1.33E-09	3.97E-10	1.18E-10	3.53E-11	1.05E-11
ni 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 67	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 67	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 68	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 69	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 69m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 69	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 71m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 71m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

cu 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

1

Part E 5000 year criticality at 2.182 kw/package — fission products — page 206

decay, following reactor irradiation identified by: power= 1.039E-04kw, burnup=1.897E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =88U 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
zn 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 77m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 77m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 79	1.17E-01	9.50E-02	7.70E-02	6.24E-02	5.06E-02	4.10E-02	3.32E-02	2.69E-02	2.18E-02	1.77E-02	1.43E-02
se 79m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 79m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 80m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

se 81m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 81	2.20E-08	2.13E-08	2.07E-08	2.00E-08	1.94E-08	1.87E-08	1.81E-08	1.78E-08	1.70E-08	1.64E-08	1.59E-08
kr 81m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 207

decay, following reactor irradiation identified by: power= 1.05E-04mw, burnup=1.87E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =88J 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
ge 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 82m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 82m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 83m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 85m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 86m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 87	6.33E-06	6.33E-06	6.33E-06	6.33E-06	6.33E-06	6.33E-06	6.33E-06	6.33E-06	6.33E-06	6.33E-06	6.33E-06
sr 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

sr 89m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 208

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.897E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =68J 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
br 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	9.08E-13	3.38E-17	1.26E-21	4.73E-26	1.76E-30	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 92	2.80E-11	2.80E-11	2.80E-11	2.80E-11	2.80E-11	2.80E-11	2.80E-11	2.80E-11	2.80E-11	2.80E-11	2.80E-11
se 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 93	3.52E-01	3.50E-01	3.49E-01	3.47E-01	3.44E-01	3.44E-01	3.42E-01	3.41E-01	3.39E-01	3.38E-01	3.36E-01
rb 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 93m	3.52E-01	3.50E-01	3.49E-01	3.47E-01	3.44E-01	3.44E-01	3.42E-01	3.41E-01	3.39E-01	3.38E-01	3.36E-01
br 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

kr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 209

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.897EE+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =8BU 15x15, 3.00wt%, 20gcd/mtu /per assem

	initial 35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
sr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 94	3.49E-05	2.48E-05	1.77E-05	1.25E-05	8.92E-06	6.34E-06	4.50E-06	3.20E-06	2.28E-06	1.62E-06	1.15E-06
rb 94m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 95m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 97m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 98m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc 98	1.23E-06	1.23E-06	1.23E-06	1.22E-06	1.22E-06	1.22E-06	1.22E-06	1.22E-06	1.21E-06	1.21E-06	1.21E-06
rb 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 99m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc 99	3.71E+00	3.59E+00	3.47E+00	3.36E+00	3.25E+00	3.14E+00	3.04E+00	2.94E+00	2.85E+00	2.76E+00	2.67E+00
tc 99m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

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Part E 5000 year criticality at 2.182 kw/package fission products page 210

decay, following reactor irradiation identified by: power= 1.039E-04kw, burnup=1.897E+03mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =BW 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
zr100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb100m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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INFORMATION ONLY

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.897E+02mwd, flux= 2.90E+08n/cm**2-sec
0 nuclide radioactivity, curies
basis =8BU 15x15, 3.00wt%, 20gcd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
y106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd107	2.68E-02	2.68E-02	2.67E-02	2.67E-02	2.67E-02	2.67E-02	2.66E-02	2.66E-02	2.66E-02	2.66E-02	2.66E-02
pd109m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag108	2.82E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag108m	3.24E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag110m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.897E+02mwd, flux= 2.90E+08n/cm**2-sec
0 nuclide radioactivity, curies

basis =88J 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
cd110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd113	1.08E-14	1.08E-14	1.08E-14	1.08E-14	1.08E-14	1.08E-14	1.08E-14	1.08E-14	1.08E-14	1.08E-14	1.08E-14
cd113m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in113m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in115	3.25E-12	3.25E-12	3.25E-12	3.25E-12	3.25E-12	3.25E-12	3.25E-12	3.25E-12	3.25E-12	3.25E-12	3.25E-12
in115m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 213

decay, following reactor irradiation identified by: power= 1.089E-04mw, burnup=1.897E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =88J 15x15, 3.00wt%, 20gwd/mtu /per assem

initial 35000. yr 45000. yr 55000. yr 65000. yr 75000. yr 85000. yr 95000. yr 105000. yr 115000. yr 125000. yr

sn115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn119m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 214

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.897E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =8W 15x15, 3.00w%, 20gwd/mtu /per assem

	initial 35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
pd121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

cd121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn121	6.86E-32	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn121m	9.13E-32	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb122m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te123	9.02E-14	9.02E-14	9.02E-14	9.02E-14	9.02E-14	9.02E-14	9.02E-14	9.02E-14	9.02E-14	9.02E-14	9.02E-14
te123m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb124m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te125m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn126	1.20E-01	1.12E-01	1.04E-01	9.71E-02	9.05E-02	8.46E-02	7.89E-02	7.36E-02	6.87E-02	6.41E-02	5.98E-02

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Part E 5000 year criticality at 2.182 kw/package fission products page 215

decay, following reactor irradiation identified by: power= 1.089E-04mw, burnup=1.897EE+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =68W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial 35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
sb126	1.67E-02	1.56E-02	1.46E-02	1.36E-02	1.27E-02	1.18E-02	1.10E-02	1.03E-02	9.62E-03	8.97E-03	8.37E-03
sb126m	1.20E-01	1.12E-01	1.04E-01	9.71E-02	9.05E-02	8.46E-02	7.89E-02	7.36E-02	6.87E-02	6.41E-02	5.98E-02
te126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

ag127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i129	8.99E-03	8.99E-03	8.98E-03	8.98E-03	8.98E-03	8.97E-03	8.97E-03	8.96E-03	8.96E-03	8.96E-03	8.95E-03
xe129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe129m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

1

Part E 5000 year criticality at 2.122 kw/package fission products page 216

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.897E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =8DJ 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial 35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
cd132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

i132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs135	2.11E-01	2.11E-01	2.10E-01	2.09E-01	2.09E-01	2.08E-01	2.08E-01	2.07E-01	2.06E-01	2.06E-01	2.05E-01
cs135m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba136m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 217

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.897GE+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =68J 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
sb137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba137m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

te138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la138	5.51E-11	5.51E-11	5.51E-11	5.51E-11	5.51E-11	5.51E-11	5.51E-11	5.51E-11	5.51E-11	5.51E-11	5.51E-11
sb139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce142	7.92E-06	7.92E-06	7.92E-06	7.92E-06	7.92E-06	7.92E-06	7.92E-06	7.92E-06	7.92E-06	7.92E-06	7.92E-06
pr142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr142m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 218

decay, following reactor irradiation identified by: power= 1.09E-04kw, burnup=1.897E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =88U 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
xe143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

ba144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd144	4.16E-10	4.16E-10	4.16E-10	4.16E-10	4.16E-10	4.16E-10	4.16E-10	4.16E-10	4.16E-10	4.16E-10	4.16E-10
i145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm146	6.88E-08	6.88E-08	6.88E-08	6.88E-08	6.87E-08	6.87E-08	6.87E-08	6.87E-08	6.87E-08	6.87E-08	6.87E-08
xe147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm147	2.10E-06	2.10E-06	2.10E-06	2.10E-06	2.10E-06	2.10E-06	2.10E-06	2.10E-06	2.10E-06	2.10E-06	2.10E-06
cs148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 219

decay, following reactor irradiation identified by: power= 1.035E-04kw, burnup=1.897E+02mwd, flux= 2.50E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =8BU 15x15, 3.00wt%, 20g-cl/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
sm148	9.08E-12	9.08E-12	9.08E-12	9.08E-12	9.08E-12	9.08E-12	9.08E-12	9.08E-12	9.08E-12	9.08E-12	9.08E-12
cs149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm149	1.89E-13	1.89E-13	1.89E-13	1.89E-13	1.89E-13	1.89E-13	1.89E-13	1.89E-13	1.89E-13	1.89E-13	1.89E-13
eu149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

la150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm151	1.50E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu152g	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd152	1.48E-11	1.48E-11	1.48E-11	1.48E-11	1.48E-11	1.48E-11	1.48E-11	1.48E-11	1.48E-11	1.48E-11	1.48E-11
la153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 220

decay, following reactor irradiation identified by: power= 1.089E-04kw, burnup=1.897E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =68J 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
sm154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

nd156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 221

decay, following reactor irradiation identified by: power= 1.039E-0kw, burnup=1.897E+02mwd, flux= 2.90E+08nv/cm**2-sec

.0 nuclide radioactivity, curies

basis =68U 15x15, 3.00wt%, 20gwd/mtu /per assem

	Initial 35000. yr	45000. yr	55000. yr	65000. yr	75000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
dy161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

gd164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166m	4.98E-08	1.54E-10	4.78E-13	1.48E-15	4.58E-18	1.42E-20	4.39E-23	1.36E-25	4.22E-28	1.30E-30	.00E+00
er166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er167	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er167m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	5.03E+00	4.87E+00	4.71E+00	4.57E+00	4.43E+00	4.30E+00	4.17E+00	4.05E+00	3.94E+00	3.83E+00	3.72E+00

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Part C 10000 year criticality at 2.182 kw/package actinides page 145

decay, following reactor irradiation identified by: power= 1.09E-04mw, burnup=3.795E+00mwd, flux= 2.93E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =8BU 15x15, 3.00wt%, 20gd/mtu /per assem

	initial	25000. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
he 4	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tl206	1.66E-07	1.66E-07	1.72E-07	2.33E-07	2.94E-07	4.11E-07	4.89E-07	5.05E-07	5.33E-07	5.54E-07	5.76E-07
tl207	1.42E-02	1.42E-02	1.42E-02	1.46E-02	1.50E-02	1.59E-02	1.67E-02	1.70E-02	1.73E-02	1.75E-02	1.77E-02
tl208	6.57E-04	5.02E-04	2.92E-07	2.70E-07	2.83E-07	3.12E-07	3.44E-07	3.60E-07	3.77E-07	3.95E-07	4.13E-07
tl209	4.76E-04	4.77E-04	5.03E-04	7.62E-04	1.06E-03	1.64E-03	2.17E-03	2.42E-03	2.66E-03	2.88E-03	3.10E-03
pb206	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb207	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb209	2.27E-02	2.27E-02	2.40E-02	3.63E-02	5.05E-02	7.80E-02	1.03E-01	1.15E-01	1.27E-01	1.37E-01	1.48E-01
pb210	1.25E-01	1.25E-01	1.30E-01	1.76E-01	2.23E-01	3.12E-01	3.70E-01	3.83E-01	4.03E-01	4.21E-01	4.36E-01
pb211	1.42E-02	1.42E-02	1.42E-02	1.46E-02	1.50E-02	1.59E-02	1.67E-02	1.70E-02	1.73E-02	1.76E-02	1.78E-02
pb212	1.83E-03	1.40E-03	8.11E-07	7.51E-07	7.88E-07	8.69E-07	9.57E-07	1.00E-06	1.05E-06	1.10E-06	1.15E-06
pb214	1.25E-01	1.26E-01	1.30E-01	1.76E-01	2.23E-01	3.12E-01	3.70E-01	3.83E-01	4.04E-01	4.21E-01	4.36E-01
bi208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi209	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210	1.25E-01	1.25E-01	1.30E-01	1.76E-01	2.23E-01	3.12E-01	3.70E-01	3.83E-01	4.03E-01	4.21E-01	4.36E-01

bi211	1.42E-02	1.42E-02	1.42E-02	1.44E-02	1.50E-02	1.59E-02	1.67E-02	1.70E-02	1.73E-02	1.78E-02	1.78E-02
bi212	1.83E-03	1.40E-03	8.11E-07	7.51E-07	7.88E-07	8.69E-07	9.57E-07	1.00E-06	1.05E-06	1.10E-06	1.15E-06
bi213	2.27E-02	2.27E-02	2.40E-02	3.63E-02	5.05E-02	7.80E-02	1.03E-01	1.15E-01	1.27E-01	1.37E-01	1.48E-01
bi214	1.25E-01	1.26E-01	1.30E-01	1.76E-01	2.23E-01	3.12E-01	3.70E-01	3.83E-01	4.04E-01	4.21E-01	4.36E-01
pb210	1.25E-01	1.25E-01	1.30E-01	1.76E-01	2.23E-01	3.12E-01	3.70E-01	3.83E-01	4.03E-01	4.21E-01	4.36E-01
pb211m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pb211	3.90E-05	3.90E-05	3.97E-05	4.01E-05	4.14E-05	4.39E-05	4.59E-05	4.68E-05	4.78E-05	4.83E-05	4.89E-05
pb212	1.17E-03	8.95E-04	5.20E-07	4.81E-07	5.03E-07	5.57E-07	6.13E-07	6.42E-07	6.73E-07	7.04E-07	7.36E-07
pb213	2.22E-02	2.22E-02	2.35E-02	3.55E-02	4.94E-02	7.64E-02	1.01E-01	1.13E-01	1.24E-01	1.34E-01	1.44E-01
pb214	1.25E-01	1.26E-01	1.30E-01	1.76E-01	2.23E-01	3.12E-01	3.70E-01	3.83E-01	4.03E-01	4.21E-01	4.36E-01
pb215	1.42E-02	1.42E-02	1.42E-02	1.44E-02	1.50E-02	1.59E-02	1.67E-02	1.70E-02	1.73E-02	1.78E-02	1.78E-02
pb216	1.83E-03	1.40E-03	8.11E-07	7.51E-07	7.88E-07	8.69E-07	9.57E-07	1.00E-06	1.05E-06	1.10E-06	1.15E-06
pb218	1.25E-01	1.26E-01	1.30E-01	1.76E-01	2.23E-01	3.12E-01	3.71E-01	3.83E-01	4.04E-01	4.21E-01	4.36E-01
at217	2.27E-02	2.27E-02	2.40E-02	3.63E-02	5.05E-02	7.80E-02	1.03E-01	1.15E-01	1.27E-01	1.37E-01	1.48E-01
rn218	1.50E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rn219	1.42E-02	1.42E-02	1.42E-02	1.44E-02	1.50E-02	1.59E-02	1.67E-02	1.70E-02	1.73E-02	1.78E-02	1.78E-02
rn220	1.83E-03	1.40E-03	8.11E-07	7.51E-07	7.88E-07	8.69E-07	9.57E-07	1.00E-06	1.05E-06	1.10E-06	1.15E-06
rn222	1.25E-01	1.26E-01	1.30E-01	1.76E-01	2.23E-01	3.12E-01	3.71E-01	3.83E-01	4.04E-01	4.21E-01	4.36E-01
fr221	2.27E-02	2.27E-02	2.40E-02	3.63E-02	5.05E-02	7.80E-02	1.03E-01	1.15E-01	1.27E-01	1.37E-01	1.48E-01
fr223	1.96E-04	1.96E-04	1.96E-04	2.01E-04	2.08E-04	2.20E-04	2.31E-04	2.35E-04	2.39E-04	2.42E-04	2.45E-04
ra222	1.50E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ra223	1.42E-02	1.42E-02	1.42E-02	1.44E-02	1.50E-02	1.59E-02	1.67E-02	1.70E-02	1.73E-02	1.78E-02	1.78E-02
ra224	1.83E-03	1.40E-03	8.11E-07	7.51E-07	7.88E-07	8.69E-07	9.57E-07	1.00E-06	1.05E-06	1.10E-06	1.15E-06
ra225	2.27E-02	2.27E-02	2.40E-02	3.63E-02	5.05E-02	7.80E-02	1.03E-01	1.15E-01	1.27E-01	1.37E-01	1.48E-01
ra226	1.25E-01	1.26E-01	1.30E-01	1.76E-01	2.23E-01	3.12E-01	3.71E-01	3.83E-01	4.04E-01	4.21E-01	4.36E-01
ra228	1.48E-07	1.48E-07	1.54E-07	2.15E-07	2.84E-07	4.22E-07	5.61E-07	6.30E-07	6.99E-07	7.68E-07	8.37E-07
ac225	2.27E-02	2.27E-02	2.40E-02	3.63E-02	5.05E-02	7.80E-02	1.03E-01	1.15E-01	1.27E-01	1.37E-01	1.48E-01
ac227	1.42E-02	1.42E-02	1.42E-02	1.44E-02	1.50E-02	1.59E-02	1.67E-02	1.70E-02	1.73E-02	1.78E-02	1.78E-02
ac228	1.48E-07	1.48E-07	1.54E-07	2.15E-07	2.84E-07	4.22E-07	5.61E-07	6.30E-07	6.99E-07	7.68E-07	8.37E-07
th226	1.50E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th227	1.40E-02	1.40E-02	1.40E-02	1.44E-02	1.48E-02	1.57E-02	1.66E-02	1.68E-02	1.71E-02	1.75E-02	1.75E-02
th228	1.83E-03	1.40E-03	8.11E-07	7.51E-07	7.88E-07	8.69E-07	9.57E-07	1.00E-06	1.05E-06	1.10E-06	1.15E-06
th229	2.27E-02	2.27E-02	2.40E-02	3.63E-02	5.05E-02	7.80E-02	1.03E-01	1.15E-01	1.27E-01	1.37E-01	1.48E-01
th230	1.37E-01	1.37E-01	1.42E-01	1.88E-01	2.33E-01	3.08E-01	3.65E-01	3.88E-01	4.08E-01	4.25E-01	4.39E-01
th231	6.86E-02	1.59E-02	1.60E-02	1.66E-02	1.72E-02	1.79E-02	1.83E-02	1.85E-02	1.86E-02	1.89E-02	1.87E-02

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Part C 10000 year criticality at 2.182 kw/package actinides page 146
decay, following reactor irradiation identified by: power= 1.05E-04mw, burnup=3.752E+02mwd, flux= 2.93E+08n/cm**2-sec
0 nuclide radioactivity, curies
basis =8bu 15x15, 3.00w%, 20gcd/mtu /per assem

	initial 25030. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
th232	1.48E-07	1.48E-07	1.54E-07	2.15E-07	2.84E-07	4.22E-07	5.61E-07	6.30E-07	6.99E-07	7.68E-07	8.37E-07
th233	7.00E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th234	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
pa231	1.42E-02	1.42E-02	1.42E-02	1.44E-02	1.50E-02	1.59E-02	1.67E-02	1.70E-02	1.73E-02	1.78E-02	1.78E-02
pa232	1.77E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pa233	3.88E-01	3.88E-01	3.88E-01	3.87E-01	3.86E-01	3.84E-01	3.81E-01	3.80E-01	3.79E-01	3.77E-01	3.76E-01
pa234m	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
pa234	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04	1.93E-04
pa235	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u230	1.50E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u231	2.04E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u232	1.83E-03	1.36E-03	6.55E-07	5.36E-07	5.04E-07	4.47E-07	3.96E-07	3.73E-07	3.51E-07	3.31E-07	3.11E-07
u233	3.74E-02	3.74E-02	3.88E-02	5.23E-02	6.66E-02	9.31E-02	1.17E-01	1.28E-01	1.39E-01	1.49E-01	1.59E-01
u234	7.24E-01	7.24E-01	7.23E-01	7.09E-01	6.93E-01	6.63E-01	6.35E-01	6.22E-01	6.09E-01	5.96E-01	5.83E-01
u235	1.59E-02	1.59E-02	1.60E-02	1.66E-02	1.72E-02	1.79E-02	1.83E-02	1.85E-02	1.86E-02	1.89E-02	1.87E-02
u236	1.39E-01	1.39E-01	1.36E-01	1.39E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01
u237	3.16E+00	1.19E-05	1.95E-08	9.28E-09	4.10E-09	8.08E-10	1.57E-10	6.95E-11	3.08E-11	1.36E-11	6.02E-12
u238	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01	1.49E-01
u239	6.86E+01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

u240	1.45E-12	1.45E-12	1.52E-12	2.18E-12	2.89E-12	4.26E-12	5.59E-12	6.23E-12	6.86E-12	7.47E-12	8.07E-12
u241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np235	5.68E-07	2.68E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236m	1.10E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236	6.39E-06	6.39E-06	6.35E-06	6.00E-06	5.67E-06	5.00E-06	4.45E-06	4.19E-06	3.95E-06	3.72E-06	3.50E-06
np237	3.88E-01	3.88E-01	3.88E-01	3.87E-01	3.86E-01	3.84E-01	3.81E-01	3.80E-01	3.79E-01	3.77E-01	3.76E-01
np238	3.07E+00	7.57E-06	6.43E-08	3.98E-27	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np239	6.90E+01	4.09E-01	3.73E-01	1.60E-01	6.25E-02	9.52E-03	1.45E-03	5.67E-04	2.21E-04	8.64E-05	3.37E-05
np240m	1.45E-12	1.45E-12	1.52E-12	2.18E-12	2.89E-12	4.26E-12	5.59E-12	6.23E-12	6.86E-12	7.47E-12	8.07E-12
np240	1.10E-06	1.74E-15	1.83E-15	2.61E-15	3.46E-15	5.12E-15	6.70E-15	7.47E-15	8.23E-15	8.97E-15	9.69E-15
np241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu236	5.33E-05	6.10E-07	5.65E-07	5.36E-07	5.04E-07	4.47E-07	3.96E-07	3.73E-07	3.51E-07	3.31E-07	3.11E-07
pu237	5.50E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu238	3.08E+00	2.43E+00	1.15E-03	1.92E-24	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu239	8.69E+01	8.68E+01	8.44E+01	6.52E+01	4.90E+01	2.76E+01	1.55E+01	1.14E+01	8.73E+00	6.55E+00	4.91E+00
pu240	1.84E+01	1.83E+01	1.65E+01	6.39E+00	2.22E+00	2.69E-01	3.25E-02	1.13E-02	3.95E-03	1.37E-03	4.75E-04
pu241	2.12E+00	4.98E-01	8.09E-04	3.88E-04	1.72E-04	3.36E-05	6.58E-06	2.91E-06	1.29E-06	5.69E-07	2.52E-07
pu242	2.61E-01	2.61E-01	2.60E-01	2.56E-01	2.51E-01	2.42E-01	2.33E-01	2.29E-01	2.25E-01	2.21E-01	2.17E-01
pu243	3.73E-01	2.85E-09	2.85E-09	2.84E-09	2.84E-09	2.84E-09	2.84E-09	2.84E-09	2.84E-09	2.83E-09	2.83E-09
pu244	1.45E-12	1.46E-12	1.53E-12	2.18E-12	2.89E-12	4.27E-12	5.59E-12	6.24E-12	6.86E-12	7.48E-12	8.08E-12
pu245	1.34E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu246	2.26E-17	2.26E-17	2.17E-17	1.52E-17	1.03E-17	4.59E-18	2.07E-18	1.39E-18	9.34E-19	6.27E-19	4.21E-19
am239	1.81E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am240	1.81E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am241	2.14E+00	2.09E+00	4.46E-01	3.88E-04	1.72E-04	3.36E-05	6.58E-06	2.91E-06	1.29E-06	5.69E-07	2.52E-07
am242m	1.95E-03	1.68E-03	1.43E-05	8.72E-25	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am242	1.20E-02	1.67E-03	1.42E-05	8.68E-25	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am243	4.10E-01	4.09E-01	3.73E-01	1.60E-01	6.25E-02	9.52E-03	1.45E-03	5.67E-04	2.21E-04	8.64E-05	3.37E-05
am244m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am244	1.52E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am245	1.38E-12	1.94E-24	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am246	2.26E-17	2.26E-17	2.17E-17	1.52E-17	1.03E-17	4.59E-18	2.07E-18	1.39E-18	9.34E-19	6.27E-19	4.21E-19
cm241	2.23E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package actinides page 147
decay, following reactor irradiation identified by: power= 1.03E-04mw, burnup=3.795E+02mwd, flux= 2.93E+08n/cm**2-sec
0 nuclide radioactivity, curies
basis =86M 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	25000. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
cm242	9.92E-03	1.38E-03	1.18E-05	7.20E-25	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm243	3.98E-09	1.92E-09	1.09E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm244	1.52E-02	4.81E-03	3.53E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm245	8.76E-04	8.74E-04	8.08E-04	3.88E-04	1.71E-04	3.35E-05	6.56E-06	2.90E-06	1.28E-06	5.68E-07	2.51E-07
cm246	5.18E-05	5.16E-05	4.47E-05	1.20E-05	2.78E-06	1.48E-07	7.88E-09	1.83E-09	4.20E-10	9.71E-11	2.24E-11
cm247	2.85E-09	2.85E-09	2.85E-09	2.84E-09	2.84E-09	2.84E-09	2.84E-09	2.84E-09	2.84E-09	2.83E-09	2.83E-09
cm248	9.25E-09	9.25E-09	9.21E-09	9.04E-09	8.86E-09	8.51E-09	8.17E-09	8.00E-09	7.84E-09	7.68E-09	7.53E-09
cm249	2.72E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm250	9.05E-17	9.03E-17	8.69E-17	6.07E-17	4.05E-17	1.84E-17	8.28E-18	5.56E-18	3.73E-18	2.51E-18	1.68E-18
cm251	2.27E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk249	2.72E-09	1.34E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk250	3.95E-14	1.26E-17	1.22E-17	8.50E-18	5.71E-18	2.57E-18	1.16E-18	7.79E-19	5.23E-19	3.51E-19	2.36E-19
bk251	2.27E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf249	2.65E-09	2.50E-09	3.68E-10	6.83E-18	1.78E-26	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf250	3.07E-12	6.26E-13	1.22E-17	8.50E-18	5.71E-18	2.57E-18	1.16E-18	7.79E-19	5.23E-19	3.51E-19	2.36E-19
cf251	2.51E-15	2.46E-15	1.16E-15	1.12E-18	4.96E-22	9.80E-29	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf252	6.43E-17	2.48E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf253	6.13E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf254	2.74E-31	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es253	6.11E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

es254m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254	8.51E-30	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
s250	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	2.61E+02	1.15E+02	1.08E+02	7.66E+01	5.65E+01	3.41E+01	2.26E+01	1.89E+01	1.63E+01	1.44E+01	1.30E+01

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Part C 10000 year criticality at 2.182 kw/package fission products page 165
decay, following reactor irradiation identified by: power= 1.09E-04mw, burnup=3.795E+02mwd, flux= 2.93E+08n/cm**2-sec
0 nuclide radioactivity, curies
basis =88W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	25000. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
h 3	1.05E-02	1.94E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
li 6	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
li 7	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
be 9	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
be 10	8.50E-07	8.50E-07	8.50E-07	8.47E-07	8.43E-07	8.36E-07	8.28E-07	8.25E-07	8.21E-07	8.18E-07	8.14E-07
c 14	2.40E-06	2.39E-06	2.13E-06	7.16E-07	2.14E-07	1.90E-08	1.69E-09	5.04E-10	1.50E-10	4.48E-11	1.34E-11
ni 66	5.71E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 66	5.73E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 67	7.46E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 67	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 68	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 69	2.44E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 69m	1.98E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 69	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 70	8.93E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 71	1.18E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 71m	5.02E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 71	1.28E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 71m	6.40E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 72	2.00E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 72	1.12E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 72	3.08E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 72	3.86E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 72	3.87E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 73	1.24E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 73	1.32E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 73	7.19E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 73	1.21E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 73	1.23E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73m	1.21E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 74	2.59E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 74	9.38E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 74	9.75E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 74	3.19E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 74	9.74E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 75	5.29E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 75	4.32E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 75	1.33E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 75	7.98E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 75	9.54E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75	9.59E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

ge 75m	5.08E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 76	1.73E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 76	1.13E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 166

decay, following reactor irradiation identified by: power= 1.08E-04mw, burnup=3.7952E+03mwd, flux= 2.93E+03n/cm**2-sec

0 nuclide radioactivity, curies

basis =68J 15x15, 3.00w%, 20gwd/mtu /per assem

	initial	25030. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
zn 76	1.88E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 76	2.74E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 76	4.03E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 77	3.88E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 77	6.55E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 77	2.29E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 77	5.56E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 77	2.10E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 77m	5.70E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 77	6.61E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 77m	2.18E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 78	7.63E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 78	2.46E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 78	2.81E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 78	1.18E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 78	1.93E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 78	1.95E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 79	6.22E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 79	1.44E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 79	1.35E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 79	3.50E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 79	3.77E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 79	1.21E-01	1.21E-01	1.18E-01	9.80E-02	7.94E-02	5.22E-02	3.43E-02	2.78E-02	2.25E-02	1.82E-02	1.48E-02
se 79m	3.74E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 79m	9.63E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 79	5.72E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 80	6.90E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 80	5.01E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 80	9.74E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 80	9.12E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 80	1.03E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 80	1.42E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 80m	3.52E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 81	6.93E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 81	1.13E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 81	6.39E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 81	9.73E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 81	1.48E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81	1.56E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81m	1.07E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 81	4.99E-08	4.99E-08	4.98E-08	4.83E-08	4.68E-08	4.38E-08	4.11E-08	3.98E-08	3.85E-08	3.73E-08	3.61E-08
kr 81m	1.21E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

zr 82	2.72E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 82	4.66E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 167

decay, following reactor irradiation identified by: power= 1.03E-04mw, burnup=3.7952E+02mwd, flux= 2.93E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =8&W 15x15, 3.00wt%, 20gcd/mtu /per assem

	Initial	25030. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
ge 82	9.73E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 82	1.56E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 82m	5.86E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 82	6.19E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 82m	5.31E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 83	1.24E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 83	4.66E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 83	4.22E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 83	2.52E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83	1.82E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83m	2.01E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 83	3.94E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 83m	3.94E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 84	5.10E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 84	2.82E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 84	1.85E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 84	7.32E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84	7.51E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84m	1.85E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 85	7.37E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 85	4.80E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 85	1.11E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85	3.55E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85m	3.12E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 85	8.50E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 85	1.86E-01	2.67E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 85m	8.51E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 86	1.02E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 86	6.43E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 86	8.70E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86	1.06E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86m	1.86E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 86	4.25E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 86m	3.39E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 87	1.08E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 87	4.08E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 87	5.18E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 87	1.38E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 87	1.73E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 87	6.46E-06	6.46E-06	6.46E-06	6.46E-06	6.46E-06	6.46E-06	6.46E-06	6.46E-06	6.46E-06	6.46E-06	6.46E-06
sr 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 87m	1.30E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 88	1.74E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 88	1.87E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 88	2.73E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

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Part C 10000 year criticality at 2.182 kw/package fission products page 168

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.795E+02mwd, flux= 2.93E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =8BW 15x15, 3.00w%, 20gd/mtu /per assem

	initial	25000. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
br 88	1.37E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 88	2.42E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 88	2.48E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 89	2.65E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 89	9.71E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 89	9.36E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 89	3.07E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 89	3.27E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 89	3.29E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89m	3.07E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 90	2.45E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 90	2.10E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 90	4.94E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 90	3.32E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90	3.05E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90m	9.11E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 90	3.97E+00	1.90E+00	8.00E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 90	3.98E+00	1.90E+00	8.01E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 90m	7.58E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 91	2.02E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 91	1.74E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 91	2.29E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	3.91E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 91	4.15E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91	4.15E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91m	2.40E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	1.90E-10	1.88E-10	6.86E-11	7.12E-15	2.66E-19	3.72E-28	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 92	1.61E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 92	2.86E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 92	1.21E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 92	3.41E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 92	4.28E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 92	4.31E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 92	6.03E-11	6.03E-11	6.03E-11	6.02E-11	6.02E-11	6.02E-11	6.02E-11	6.02E-11	6.02E-11	6.01E-11	6.01E-11
se 93	1.14E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 93	5.40E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 93	4.10E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 93	2.71E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 93	4.68E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 93	3.17E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 93	3.59E-01	3.59E-01	3.59E-01	3.57E-01	3.56E-01	3.52E-01	3.46E-01	3.48E-01	3.46E-01	3.45E-01	3.43E-01
rb 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 93m	3.59E-01	3.59E-01	3.59E-01	3.57E-01	3.56E-01	3.52E-01	3.46E-01	3.48E-01	3.46E-01	3.45E-01	3.43E-01
br 94	3.54E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 94	1.83E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 94	1.38E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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decay, following reactor irradiation identified by: power= 1.03E-04mw, burnup=3.795E+02mwd, flux= 2.93E+08n/cm**2-sec
0 nuclide radioactivity, curies
basis =8BU 15x15, 3.00wt%, 20gcd/mtu /per assem

	initial	25000. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
sr 94	4.58E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 94	4.92E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 94	7.39E-05	7.38E-05	7.14E-05	5.25E-05	3.73E-05	1.88E-05	9.52E-06	6.77E-06	4.81E-06	3.42E-06	2.43E-06
nb 94m	2.77E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 95	3.91E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 95	1.48E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 95	6.60E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 95	4.10E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 95	5.03E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 95	5.10E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 95	5.09E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 95m	5.66E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 96	8.77E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 96	2.67E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 96	1.68E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 96	3.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 96	4.79E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 96	1.17E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 97	3.46E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 97	5.07E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 97	1.54E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 97	3.90E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 97	4.71E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 97	4.73E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 97m	4.47E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 98	1.23E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 98	4.15E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 98	6.14E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 98	2.90E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 98	4.98E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 98	4.95E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 98m	3.14E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc 98	1.28E-06	1.28E-06	1.28E-06	1.28E-06	1.28E-06	1.27E-06	1.27E-06	1.27E-06	1.26E-06	1.26E-06	1.26E-06
nb 99	1.23E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 99	2.66E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 99	1.86E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 99	4.79E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 99	3.10E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 99m	2.11E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 99	5.27E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc 99	3.78E+00	3.78E+00	3.77E+00	3.66E+00	3.54E+00	3.31E+00	3.10E+00	3.00E+00	2.91E+00	2.81E+00	2.72E+00
tc 99m	4.64E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb100	3.70E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr100	2.86E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y100	5.37E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 170
decay, following reactor irradiation identified by: power= 1.03E-04mw, burnup=3.795E+02mwd, flux= 2.93E+08n/cm**2-sec
0 nuclide radioactivity, curies

INFORMATION ONLY

basis =8SW 15x15, 3.00wt%, 20gcd/mtu /per assem

	initial	25030. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
zr100	4.82E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb100	5.15E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb100m	3.26E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc100	8.44E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb101	3.05E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr101	4.63E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y101	3.13E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr101	2.69E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb101	4.44E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo101	4.64E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc101	4.65E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr102	8.61E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y102	1.66E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr102	1.95E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb102	3.66E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo102	4.19E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102	4.19E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102m	3.66E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh102	1.44E-05	1.10E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr103	5.95E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y103	5.08E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr103	6.67E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb103	2.50E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo103	3.69E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc103	3.77E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru103	3.79E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103m	3.78E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr104	1.86E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y104	9.79E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr104	1.81E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb104	1.02E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo104	2.64E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc104	2.77E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104	2.20E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104m	1.61E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y105	1.24E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr105	6.83E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb105	3.95E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo105	1.78E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc105	2.08E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru105	2.11E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105	2.11E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105m	6.00E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 171

decay, following reactor irradiation identified by: power= 1.039E-04kw, burnup=3.795E+02mwd, flux= 2.93E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =8SW 15x15, 3.00wt%, 20gcd/mtu /per assem

initial 25030. yr 26000. yr 35000. yr 45000. yr 65000. yr 85000. yr 95000. yr 105000. yr 115000. yr 125000. yr

y106	2.21E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr106	2.14E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb106	5.73E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo106	8.56E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc106	1.29E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru106	1.42E+00	1.89E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106	1.42E+00	1.89E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106m	6.14E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag106	2.80E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y107	2.02E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr107	2.11E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb107	9.29E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo107	3.08E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc107	7.82E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru107	9.66E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh107	9.66E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd107	2.73E-02	2.73E-02	2.73E-02	2.73E-02	2.72E-02	2.72E-02	2.71E-02	2.71E-02	2.71E-02	2.70E-02	2.70E-02
pd107m	8.61E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr108	8.71E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb108	2.74E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo108	3.54E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc108	2.31E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru108	5.73E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108	5.84E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108m	1.11E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag108	3.01E-04	1.76E-07	8.85E-10	4.11E-31	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag108m	2.39E-06	2.08E-06	1.02E-08	4.72E-30	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr109	7.04E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb109	1.20E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo109	3.75E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc109	7.75E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru109	4.04E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109	4.80E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109m	2.40E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109	5.72E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109m	3.34E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109m	5.73E-01	3.68E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd109	4.98E-08	3.68E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb110	5.56E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo110	4.34E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc110	1.04E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru110	1.17E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110	2.37E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110m	1.41E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag110	3.14E-01	1.06E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag110m	1.24E-02	7.68E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 172

decay, following reactor irradiation identified by: power= 1.03E-04mw, burnup=3.79SE+02mwd, flux= 2.93E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =8BU 15x15, 3.00w%, 20gcl/htu /per assem

	initial	25030. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
cd110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb111	5.08E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

mo111	4.75E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc111	2.18E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru111	3.80E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh111	8.18E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111	8.84E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111m	4.62E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111	8.91E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111m	8.87E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111m	1.50E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb112	1.91E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo112	7.87E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc112	4.53E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru112	1.44E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh112	3.58E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd112	4.50E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag112	4.51E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo113	1.64E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc113	1.27E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru113	5.15E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh113	1.85E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd113	2.79E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113	2.72E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113m	5.46E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd113	9.09E-15	9.09E-15	9.09E-15	9.09E-15	9.09E-15	9.09E-15	9.09E-15	9.09E-15	9.09E-15	9.09E-15	9.09E-15	9.09E-15
cd113m	6.56E-04	1.50E-04	2.93E-25	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in113m	2.85E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo114	8.42E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc114	2.15E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru114	2.18E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh114	1.05E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd114	2.41E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag114	2.50E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114	7.78E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114m	5.88E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo115	3.77E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc115	8.18E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru115	5.49E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh115	4.66E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd115	1.56E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115	1.23E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115m	5.10E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115	1.74E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115m	8.15E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in115	3.25E-12	3.25E-12	3.25E-12	3.25E-12	3.25E-12	3.25E-12	3.25E-12	3.25E-12	3.25E-12	3.25E-12	3.25E-12	3.25E-12
in115m	1.74E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 173

decay, following reactor irradiation identified by: power= 1.09E-04mw, burnup=3.795E+02mwd, flux= 2.93E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =65W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial 2500. yr	2600. yr	3500. yr	4500. yr	6500. yr	8500. yr	9500. yr	10500. yr	11500. yr	12500. yr
sn115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc116	3.51E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru116	1.93E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh116	2.61E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

pd116	1.89E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116	2.14E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116m	2.43E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116	3.65E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116m	1.37E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc117	4.34E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru117	3.08E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh117	1.00E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd117	1.23E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117	1.08E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117m	1.08E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117	1.80E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117m	4.08E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117	1.33E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117m	1.64E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117m	1.14E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc118	1.23E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru118	4.99E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh118	2.44E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd118	6.08E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118	1.02E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118m	7.23E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd118	1.75E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118	1.75E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118m	1.95E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru119	6.61E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh119	9.55E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd119	3.68E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag119	1.25E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119	1.27E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119m	5.67E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119	7.38E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119m	1.15E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn119m	1.49E-04	8.28E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru120	8.28E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh120	2.08E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd120	1.91E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag120	8.12E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd120	1.74E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120	1.77E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120m	2.75E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh121	5.79E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 174

decay, following reactor irradiation identified by: power= 1.09E-04kw, burnup=3.79E+02mwd, flux= 2.93E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =68# 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	25000. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
pd121	8.20E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag121	6.00E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd121	1.77E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121	1.53E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121m	1.80E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn121	1.94E-02	1.05E-04	5.16E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

sn121m	1.97E-04	1.35E-04	6.65E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh122	6.40E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd122	2.73E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag122	3.11E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd122	1.90E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122	2.09E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122m	1.95E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb122	2.08E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb122m	2.08E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh123	5.46E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd123	4.77E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag123	1.26E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd123	1.25E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123	1.51E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123m	4.14E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123	1.78E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123m	2.08E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te123	9.43E-14	9.43E-14	9.43E-14	9.43E-14	9.43E-14	9.43E-14	9.43E-14	9.43E-14	9.43E-14	9.43E-14	9.43E-14	9.43E-14
te123m	1.35E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd124	2.62E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag124	9.92E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd124	1.97E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in124	3.50E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb124	1.62E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb124m	3.22E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd125	6.43E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag125	4.85E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd125	1.28E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125	1.99E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125m	1.48E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125	1.14E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125m	3.50E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb125	4.68E-02	2.28E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te125m	1.07E-02	5.59E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd126	1.42E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag126	1.96E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd126	1.43E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in126	4.38E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn126	1.23E-01	1.22E-01	1.22E-01	1.14E-01	1.07E-01	9.28E-02	8.08E-02	7.54E-02	7.04E-02	6.56E-02	6.13E-02	

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Part C 10000 year criticality at 2.182 kw/package fission products page 175

decay, following reactor irradiation identified by: power= 1.089E-04mw, burnup=3.795E+02mwd, flux= 2.93E+08n/cm**2-sec

0

nuclide radioactivity, curies

basis =BWR 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	25000. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
sb126	1.77E-02	1.71E-02	1.70E-02	1.60E-02	1.49E-02	1.30E-02	1.13E-02	1.03E-02	9.35E-03	9.19E-03	8.58E-03
sb126m	1.23E-01	1.22E-01	1.22E-01	1.14E-01	1.07E-01	9.28E-02	8.08E-02	7.54E-02	7.04E-02	6.56E-02	6.13E-02
te126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag127	1.08E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd127	1.09E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127	4.08E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127m	4.08E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

sn127	7.68E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127m	1.08E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb127	1.93E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127	1.93E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127m	3.39E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe127	7.41E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag128	5.55E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd128	1.15E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in128	8.76E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn128	3.66E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128	3.50E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128m	3.83E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i128	1.84E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd129	5.69E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in129	1.01E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129	3.18E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129m	3.42E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb129	8.29E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129	7.85E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129m	1.58E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i129	9.17E-03	9.17E-03	9.17E-03	9.17E-03	9.16E-03	9.15E-03	9.14E-03	9.14E-03	9.14E-03	9.13E-03	9.13E-03	
xe129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe129m	4.22E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd130	2.16E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in130	8.09E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn130	9.64E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130	2.71E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130m	1.27E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130	4.40E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130m	2.34E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd131	3.28E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in131	3.35E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn131	8.13E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb131	2.23E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131	2.35E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131m	4.82E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i131	2.73E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131m	2.99E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 176

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.795E+02mwd, flux= 2.93E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =8BU 15x15, 3.00wt%, 20g-cd/intu /per assem

	initial	2500. yr	6000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
cd132	4.02E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in132	9.11E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn132	6.50E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132	1.25E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132m	1.33E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te132	3.96E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i132	4.01E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs132	9.67E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

in133	2.73E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn133	1.86E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb133	1.94E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133	3.21E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133m	2.66E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133	5.80E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133m	4.07E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133	5.82E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133m	1.78E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba133	4.62E-10	6.40E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in134	4.55E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn134	3.08E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134	3.68E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134m	2.48E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te134	5.43E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134	6.53E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134m	4.69E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134m	9.76E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134	1.15E+00	4.78E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134m	8.73E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn135	2.61E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb135	1.57E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te135	2.79E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i135	5.47E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135	5.86E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135m	1.13E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs135	2.20E-01	2.20E-01	2.20E-01	2.19E-01	2.19E-01	2.17E-01	2.16E-01	2.15E-01	2.15E-01	2.14E-01	2.13E-01
cs135m	1.98E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135m	1.44E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn136	2.32E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb136	2.46E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te136	1.31E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136	2.63E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136m	1.24E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs136	1.53E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba136m	1.71E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 177

decay, following reactor irradiation identified by: power= 1.03E-04mw, burnup=3.752E+02mwd, flux= 2.93E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =8kw 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	25000. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
sb137	3.21E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te137	4.40E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i137	2.74E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe137	5.25E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs137	5.49E+00	2.75E+00	5.06E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba137m	5.19E+00	2.59E+00	4.78E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb138	3.36E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te138	1.03E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i138	1.37E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe138	5.10E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138	5.45E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

cs138m	1.95E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la138	5.62E-11	5.62E-11	5.62E-11	5.62E-11	5.62E-11	5.62E-11	5.62E-11	5.62E-11	5.62E-11	5.62E-11	5.62E-11	5.62E-11
sb139	2.59E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te139	1.65E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i139	7.49E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe139	3.94E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs139	5.15E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba139	5.26E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce139	3.18E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr139	1.77E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te140	2.50E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i140	1.77E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe140	2.82E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs140	4.65E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba140	5.21E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la140	5.31E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr140	6.17E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te141	2.87E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i141	2.30E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe141	1.07E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs141	3.58E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba141	4.79E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la141	4.82E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce141	4.83E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd141	7.87E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te142	1.03E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i142	5.47E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe142	4.20E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs142	2.11E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba142	4.61E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la142	4.75E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce142	8.07E-06	8.07E-06	8.07E-06	8.07E-06	8.07E-06	8.07E-06	8.07E-06	8.07E-06	8.07E-06	8.07E-06	8.07E-06	8.07E-06
pr142	1.28E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr142m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i143	7.49E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 178

decay, following reactor irradiation identified by: power= 1.09E-04kw, burnup=3.795E+02mwd, flux= 2.93E+08n/cm**2-sec

0

nuclide radioactivity, curies

basis =BW 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	25000. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
xe143	6.15E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs143	1.12E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba143	4.05E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la143	4.61E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce143	4.65E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr143	4.65E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i144	3.00E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe144	1.30E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs144	3.12E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba144	3.28E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la144	4.14E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce144	4.22E+00	1.12E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144	4.22E+00	1.12E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

pr144m	5.92E-02	1.57E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd144	4.26E-10	4.26E-10	4.26E-10	4.26E-10	4.26E-10	4.26E-10	4.26E-10	4.26E-10	4.26E-10	4.26E-10	4.26E-10
i145	9.46E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe145	1.26E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs145	7.34E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba145	1.43E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la145	2.83E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce145	3.13E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr145	3.13E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm145	2.13E-05	6.93E-06	2.20E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm145	2.09E-05	4.16E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe146	1.16E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs146	1.79E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba146	7.78E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la146	1.88E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce146	2.45E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr146	2.46E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm146	4.28E-07	9.98E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm146	7.64E-08	7.64E-08	7.64E-08	7.64E-08	7.64E-08	7.64E-08	7.64E-08	7.64E-08	7.64E-08	7.64E-08	7.64E-08
xe147	3.68E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs147	3.60E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba147	1.17E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la147	7.78E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce147	1.82E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr147	1.90E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd147	1.92E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm147	1.92E+00	7.00E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm147	2.14E-06	2.14E-06	2.14E-06	2.14E-06	2.14E-06	2.14E-06	2.14E-06	2.14E-06	2.14E-06	2.14E-06	2.14E-06
cs148	6.57E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba148	2.29E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la148	2.41E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce148	1.28E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr148	1.45E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148	2.19E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148m	2.20E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 179

decay, following reactor irradiation identified by: power= 1.09E-04mw, burnup=3.79ZE+02mwd, flux= 2.93E+08n/cm**2-sec

0 nuclide radioactivity, curies

basis =68W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	2500. yr	2600. yr	3500. yr	4500. yr	6500. yr	8500. yr	9500. yr	10500. yr	11500. yr	12500. yr
sm148	9.3E-12	9.3E-12	9.3E-12	9.3E-12	9.3E-12	9.3E-12	9.3E-12	9.3E-12	9.3E-12	9.3E-12	9.3E-12
cs149	5.45E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba149	2.53E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la149	6.74E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce149	6.52E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr149	9.63E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd149	1.02E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm149	1.03E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm149	1.67E-13	1.67E-13	1.67E-13	1.67E-13	1.67E-13	1.67E-13	1.67E-13	1.67E-13	1.67E-13	1.67E-13	1.67E-13
eu149	1.58E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs150	6.98E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba150	2.29E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la150	1.08E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce150	2.78E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr150	5.71E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

pm150	2.91E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu150	1.95E-06	1.09E-06	7.62E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba151	2.32E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la151	1.83E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce151	7.66E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr151	2.87E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd151	4.74E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm151	4.80E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm151	8.08E-01	6.40E-01	3.64E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba152	4.98E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la152	1.50E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce152	7.17E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr152	8.50E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd152	3.03E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152	3.13E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152m	1.03E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu152	6.32E-01	1.33E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu152m	3.43E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd152	2.88E-11	2.88E-11	2.88E-11	2.88E-11	2.88E-11	2.88E-11	2.88E-11	2.88E-11	2.88E-11	2.88E-11	2.88E-11
la153	1.51E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce153	3.62E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr153	3.80E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd153	1.70E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm153	2.04E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm153	9.80E-01	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd153	3.99E-03	8.80E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la154	3.94E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce154	3.66E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr154	6.57E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd154	7.60E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154	9.54E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154m	1.93E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 180
decay, following reactor irradiation identified by: power= 1.03E-04mw, burnup=3.795E+02mwd, flux= 2.93E+08n/cm**2-sec
0 nuclide radioactivity, curies
basis =BW 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	25000. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
sm154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu154	5.08E-01	4.52E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la155	2.00E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce155	3.24E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr155	1.47E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd155	2.49E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm155	5.66E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm155	6.98E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu155	7.00E-02	8.23E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce156	2.53E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr156	1.99E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd156	7.91E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm156	2.54E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm156	3.98E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu156	4.03E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

INFORMATION ONLY

gd156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce157	1.22E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr157	3.18E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd157	1.88E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm157	1.00E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm157	2.27E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu157	2.38E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr158	1.71E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd158	3.20E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm158	2.37E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm158	1.09E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu158	1.25E-02	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr159	7.38E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd159	2.98E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm159	4.78E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm159	3.95E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu159	5.86E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd159	7.74E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd160	1.98E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm160	5.36E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm160	1.12E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu160	2.37E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb160	1.93E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd161	8.15E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm161	6.64E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm161	2.17E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu161	8.67E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd161	1.30E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb161	1.31E-03	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 181
decay, following reactor irradiation identified by: power= 1.08E-04mw, burnup=3.795E+00mwd, flue= 2.93E+08n/cm**2-sec
0 nuclide radioactivity, curies
basis =8&/ 15x15, 3.00wt%, 20gcd/mtu /per assem

	initial	25000. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
dy161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm162	4.54E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm162	3.66E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu162	2.31E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd162	5.89E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162	6.01E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162m	1.24E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm163	2.87E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu163	4.32E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd163	2.07E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163	2.42E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm164	2.18E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu164	4.98E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd164	6.13E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb164	8.85E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm165	1.16E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

au165	5.56E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd165	1.32E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb165	3.08E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165	4.49E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165m	3.40E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy166	5.55E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166	6.77E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166m	1.00E-06	9.87E-07	5.64E-07	3.11E-09	9.65E-12	9.27E-17	8.90E-22	2.76E-24	8.55E-27	2.66E-29	9.13E-32
er166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er167	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er167m	1.83E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er169	9.55E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170	6.01E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er171	1.30E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm171	1.32E-08	2.62E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er172	7.67E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm172	8.08E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	5.33E+02	1.51E+01	5.12E+00	4.97E+00	4.81E+00	4.52E+00	4.26E+00	4.14E+00	4.02E+00	3.91E+00	3.80E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay actinides page 81

nuclide concentrations, grams
basis =per B&W assembly, 0.409 mthm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
he 4	4.81E+00	5.62E+00	8.60E+00	1.20E+01	1.64E+01	2.01E+01	2.33E+01	2.62E+01	2.89E+01	3.13E+01	3.24E+01
tl206	9.52E-19	1.54E-18	6.83E-18	2.46E-17	7.84E-17	1.44E-16	2.13E-16	2.82E-16	3.51E-16	4.19E-16	4.52E-16
tl207	6.23E-13	7.73E-13	1.57E-12	3.06E-12	5.99E-12	8.86E-12	1.17E-11	1.44E-11	1.71E-11	1.97E-11	2.10E-11
tl208	2.85E-13	1.06E-13	1.26E-15	5.33E-16	5.39E-16	5.46E-16	5.53E-16	5.61E-16	5.70E-16	5.79E-16	5.83E-16
tl209	2.31E-16	3.81E-16	1.90E-15	9.43E-15	4.29E-14	9.80E-14	1.71E-13	2.59E-13	3.59E-13	4.70E-13	5.28E-13
pb206	7.74E-06	1.59E-05	1.44E-04	1.12E-03	7.68E-03	2.22E-02	4.57E-02	7.83E-02	1.20E-01	1.71E-01	2.00E-01
pb207	9.84E-06	1.52E-05	6.00E-05	2.35E-04	9.26E-04	2.06E-03	3.63E-03	5.63E-03	8.04E-03	1.09E-02	1.24E-02
pb208	4.69E-04	4.75E-04	4.79E-04	4.79E-04	4.80E-04	4.80E-04	4.80E-04	4.81E-04	4.81E-04	4.81E-04	4.82E-04
pb209	9.74E-13	1.61E-12	8.02E-12	3.98E-11	1.81E-10	4.14E-10	7.23E-10	1.09E-09	1.52E-09	1.98E-09	2.23E-09
pb210	2.05E-06	3.32E-06	1.47E-05	5.30E-05	1.69E-04	3.10E-04	4.58E-04	6.08E-04	7.57E-04	9.03E-04	9.75E-04
pb211	4.82E-12	5.98E-12	1.21E-11	2.36E-11	4.63E-11	6.85E-11	9.03E-11	1.12E-10	1.32E-10	1.53E-10	1.63E-10
pb212	1.69E-10	6.29E-11	7.49E-13	3.16E-13	3.19E-13	3.24E-13	3.28E-13	3.33E-13	3.38E-13	3.43E-13	3.46E-13
pb214	5.62E-12	8.80E-12	3.43E-11	1.23E-10	3.94E-10	7.21E-10	1.07E-09	1.42E-09	1.76E-09	2.10E-09	2.27E-09
bi208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi209	2.33E-07	4.71E-07	4.52E-06	4.51E-05	4.27E-04	1.51E-03	3.61E-03	6.99E-03	1.19E-02	1.84E-02	2.23E-02
bi210m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210	1.26E-09	2.04E-09	9.06E-09	3.26E-08	1.04E-07	1.91E-07	2.82E-07	3.74E-07	4.66E-07	5.56E-07	6.00E-07
bi211	2.86E-13	3.55E-13	7.20E-13	1.40E-12	2.74E-12	4.06E-12	5.35E-12	6.61E-12	7.84E-12	9.05E-12	9.64E-12
bi212	1.61E-11	5.97E-12	7.10E-14	3.00E-14	3.03E-14	3.07E-14	3.11E-14	3.16E-14	3.20E-14	3.25E-14	3.28E-14
bi213	2.32E-13	3.83E-13	1.91E-12	9.48E-12	4.31E-11	9.85E-11	1.72E-10	2.61E-10	3.61E-10	4.72E-10	5.31E-10
bi214	4.17E-12	6.53E-12	2.55E-11	9.16E-11	2.92E-10	5.35E-10	7.93E-10	1.05E-09	1.31E-09	1.56E-09	1.69E-09
po210	3.49E-08	5.65E-08	2.50E-07	9.01E-07	2.87E-06	5.26E-06	7.79E-06	1.03E-05	1.29E-05	1.54E-05	1.66E-05
po211m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
po211	3.16E-18	3.92E-18	7.95E-18	1.55E-17	3.03E-17	4.49E-17	5.91E-17	7.31E-17	8.67E-17	1.00E-16	1.07E-16
po212	8.44E-22	3.14E-22	3.73E-24	1.57E-24	1.59E-24	1.61E-24	1.63E-24	1.66E-24	1.68E-24	1.71E-24	1.72E-24
po213	3.49E-22	5.76E-22	2.87E-21	1.43E-20	6.48E-20	1.48E-19	2.59E-19	3.92E-19	5.43E-19	7.10E-19	7.98E-19
po214	5.74E-19	8.99E-19	3.50E-18	1.26E-17	4.02E-17	7.37E-17	1.09E-16	1.45E-16	1.80E-16	2.15E-16	2.32E-16
po215	4.04E-18	5.01E-18	1.02E-17	1.98E-17	3.88E-17	5.74E-17	7.56E-17	9.34E-17	1.11E-16	1.28E-16	1.36E-16
po216	6.53E-16	2.43E-16	2.89E-18	1.22E-18	1.23E-18	1.25E-18	1.27E-18	1.28E-18	1.30E-18	1.32E-18	1.33E-18
po218	6.62E-13	1.04E-12	4.04E-12	1.45E-11	4.64E-11	8.50E-11	1.26E-10	1.67E-10	2.08E-10	2.48E-10	2.68E-10
at217	2.79E-18	4.61E-18	2.30E-17	1.14E-16	5.19E-16	1.19E-15	2.07E-15	3.14E-15	4.35E-15	5.68E-15	6.39E-15
rn218	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rn219	9.14E-15	1.13E-14	2.30E-14	4.49E-14	8.79E-14	1.30E-13	1.71E-13	2.12E-13	2.51E-13	2.90E-13	3.09E-13
rn220	2.55E-13	9.48E-14	1.13E-15	4.76E-16	4.81E-16	4.87E-16	4.94E-16	5.01E-16	5.09E-16	5.17E-16	5.21E-16
rn222	1.20E-09	1.88E-09	7.31E-09	2.63E-08	8.39E-08	1.54E-07	2.28E-07	3.02E-07	3.76E-07	4.49E-07	4.84E-07
fr221	2.59E-14	4.27E-14	2.13E-13	1.06E-12	4.81E-12	1.10E-11	1.92E-11	2.91E-11	4.03E-11	5.27E-11	5.92E-11
fr223	4.24E-14	5.27E-14	1.07E-13	2.08E-13	4.08E-13	6.03E-13	7.95E-13	9.82E-13	1.17E-12	1.34E-12	1.43E-12
ra222	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ra223	2.32E-09	2.88E-09	5.85E-09	1.14E-08	2.23E-08	3.30E-08	4.35E-08	5.38E-08	6.38E-08	7.36E-08	7.84E-08
ra224	1.48E-09	5.49E-10	6.53E-12	2.76E-12	2.79E-12	2.82E-12	2.86E-12	2.90E-12	2.95E-12	2.99E-12	3.02E-12
ra225	1.15E-10	1.89E-10	9.43E-10	4.68E-09	2.13E-08	4.87E-08	8.50E-08	1.29E-07	1.79E-07	2.33E-07	2.62E-07
ra226	1.86E-04	2.92E-04	1.14E-03	4.09E-03	1.31E-02	2.39E-02	3.54E-02	4.70E-02	5.85E-02	6.98E-02	7.53E-02
ra228	6.71E-12	8.40E-12	1.70E-11	3.46E-11	7.19E-11	1.11E-10	1.52E-10	1.95E-10	2.39E-10	2.83E-10	3.06E-10
ac225	7.74E-11	1.28E-10	6.37E-10	3.16E-09	1.44E-08	3.29E-08	5.74E-08	8.70E-08	1.21E-07	1.58E-07	1.77E-07
ac227	1.64E-06	2.04E-06	4.14E-06	8.07E-06	1.58E-05	2.34E-05	3.08E-05	3.81E-05	4.52E-05	5.21E-05	5.55E-05
ac228	8.19E-16	1.03E-15	2.07E-15	4.23E-15	8.77E-15	1.36E-14	1.86E-14	2.38E-14	2.91E-14	3.46E-14	3.73E-14
th226	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th227	3.82E-09	4.74E-09	9.61E-09	1.87E-08	3.67E-08	5.43E-08	7.15E-08	8.83E-08	1.05E-07	1.21E-07	1.29E-07
th228	2.87E-07	1.07E-07	1.27E-09	5.35E-10	5.42E-10	5.48E-10	5.56E-10	5.64E-10	5.73E-10	5.82E-10	5.86E-10
th229	2.27E-05	3.75E-05	1.87E-04	9.27E-04	4.21E-03	9.63E-03	1.68E-02	2.55E-02	3.53E-02	4.62E-02	5.19E-02
th230	1.13E-01	1.43E-01	2.95E-01	5.98E-01	1.19E+00	1.77E+00	2.34E+00	2.89E+00	3.44E+00	3.96E+00	4.22E+00
th231	2.57E-08	2.58E-08	2.59E-08	2.62E-08	2.68E-08	2.73E-08	2.78E-08	2.82E-08	2.87E-08	2.91E-08	2.93E-08

nuclide concentrations, grams
basis =per B&W assembly, 0.409 mthm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
th232	1.67E-02	2.09E-02	4.22E-02	8.61E-02	1.79E-01	2.77E-01	3.79E-01	4.85E-01	5.94E-01	7.04E-01	7.61E-01
th233	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th234	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06
pa231	2.71E-03	3.32E-03	6.34E-03	1.23E-02	2.42E-02	3.58E-02	4.71E-02	5.83E-02	6.91E-02	7.97E-02	8.49E-02
pa232	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pa233	1.08E-05	1.19E-05	1.55E-05	1.78E-05	1.84E-05	1.84E-05	1.84E-05	1.84E-05	1.84E-05	1.84E-05	1.84E-05
pa234m	2.17E-10	2.17E-10	2.17E-10	2.17E-10	2.17E-10	2.17E-10	2.17E-10	2.17E-10	2.17E-10	2.17E-10	2.17E-10
pa234	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11
pa235	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u230	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u231	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u232	1.04E-05	3.85E-06	4.62E-08	1.95E-08	1.92E-08	1.90E-08	1.88E-08	1.85E-08	1.83E-08	1.81E-08	1.80E-08
u233	2.99E-02	4.06E-02	1.06E-01	2.64E-01	6.03E-01	9.41E-01	1.28E+00	1.61E+00	1.94E+00	2.26E+00	2.43E+00
u234	1.09E+02	1.10E+02	1.11E+02	1.10E+02	1.10E+02	1.09E+02	1.09E+02	1.08E+02	1.08E+02	1.07E+02	1.07E+02
u235	6.33E+03	6.34E+03	6.37E+03	6.44E+03	6.58E+03	6.71E+03	6.83E+03	6.95E+03	7.06E+03	7.16E+03	7.21E+03
u236	1.44E+03	1.45E+03	1.48E+03	1.54E+03	1.64E+03	1.72E+03	1.79E+03	1.84E+03	1.89E+03	1.92E+03	1.94E+03
u237	2.28E-12	2.22E-12	2.13E-12	1.96E-12	1.67E-12	1.41E-12	1.20E-12	1.02E-12	8.67E-13	7.37E-13	6.79E-13
u238	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05
u239	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u240	2.39E-20	2.98E-20	5.96E-20	1.19E-19	2.38E-19	3.56E-19	4.74E-19	5.91E-19	7.07E-19	8.24E-19	8.82E-19
u241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np235	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236	3.70E-04	3.70E-04	3.68E-04	3.66E-04	3.62E-04	3.58E-04	3.53E-04	3.49E-04	3.45E-04	3.41E-04	3.39E-04
np237	3.17E+02	3.51E+02	4.57E+02	5.25E+02	5.42E+02	5.42E+02	5.42E+02	5.41E+02	5.41E+02	5.41E+02	5.41E+02
np238	1.10E-08	6.72E-09	5.76E-10	4.22E-12	2.27E-16	1.22E-20	6.54E-25	3.51E-29	1.89E-33	8.80E-38	.00E+00
np239	8.36E-06	8.28E-06	7.90E-06	7.19E-06	5.96E-06	4.94E-06	4.09E-06	3.39E-06	2.81E-06	2.33E-06	2.12E-06
np240m	2.04E-22	2.55E-22	5.09E-22	1.02E-21	2.03E-21	3.04E-21	4.04E-21	5.04E-21	6.04E-21	7.03E-21	7.52E-21
np240	2.10E-24	2.62E-24	5.24E-24	1.05E-23	2.09E-23	3.12E-23	4.16E-23	5.19E-23	6.21E-23	7.23E-23	7.74E-23
np241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu236	8.30E-10	8.30E-10	8.27E-10	8.22E-10	8.12E-10	8.02E-10	7.93E-10	7.83E-10	7.74E-10	7.65E-10	7.60E-10
pu237	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu238	1.35E+00	6.23E-01	1.53E-02	1.74E-05	1.67E-09	8.99E-14	4.83E-18	2.60E-22	1.39E-26	7.49E-31	2.94E-33
pu239	2.60E+03	2.59E+03	2.56E+03	2.49E+03	2.35E+03	2.22E+03	2.10E+03	1.98E+03	1.87E+03	1.77E+03	1.72E+03
pu240	6.46E+02	6.39E+02	6.06E+02	5.45E+02	4.41E+02	3.57E+02	2.89E+02	2.34E+02	1.90E+02	1.53E+02	1.38E+02
pu241	7.54E-05	7.32E-05	7.03E-05	6.48E-05	5.50E-05	4.67E-05	3.97E-05	3.37E-05	2.86E-05	2.43E-05	2.24E-05
pu242	7.08E+01	7.08E+01	7.07E+01	7.06E+01	7.03E+01	7.01E+01	6.98E+01	6.96E+01	6.93E+01	6.91E+01	6.89E+01
pu243	1.13E-15	1.13E-15	1.13E-15	1.13E-15	1.13E-15	1.13E-15	1.13E-15	1.13E-15	1.13E-15	1.13E-15	1.13E-15
pu244	1.21E-09	1.51E-09	3.02E-09	6.03E-09	1.20E-08	1.80E-08	2.40E-08	2.99E-08	3.58E-08	4.17E-08	4.46E-08
pu245	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu246	1.23E-21	1.23E-21	1.20E-21	1.15E-21	1.07E-21	9.84E-22	9.09E-22	8.39E-22	7.75E-22	7.16E-22	6.88E-22
am239	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am240	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am241	2.30E+02	1.96E+02	8.77E+01	1.77E+01	7.18E-01	3.05E-02	2.43E-03	1.11E-03	9.03E-04	7.66E-04	7.04E-04
am242m	6.04E-02	3.70E-02	3.16E-03	2.32E-05	1.25E-09	6.69E-14	3.59E-18	1.93E-22	1.04E-26	5.57E-31	4.08E-33
am242	7.80E-07	4.77E-07	4.08E-08	2.99E-10	1.61E-14	8.63E-19	4.64E-23	2.49E-27	1.34E-31	7.19E-36	5.64E-38
am243	9.71E+00	9.62E+00	9.18E+00	8.36E+00	6.92E+00	5.74E+00	4.75E+00	3.94E+00	3.26E+00	2.70E+00	2.46E+00
am244m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am244	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am245	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am246	3.07E-24	3.06E-24	3.00E-24	2.88E-24	2.66E-24	2.46E-24	2.27E-24	2.10E-24	1.94E-24	1.79E-24	1.72E-24
cm241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

1

Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay actinides page 83

0 nuclide concentrations, grams
basis =per B&W assembly, 0.409 mthm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
cm242	1.57E-04	9.63E-05	8.24E-06	6.04E-08	3.26E-12	1.75E-16	9.39E-21	5.05E-25	2.71E-29	1.46E-33	1.38E-35
cm243	3.59E-06	3.15E-07	1.65E-12	4.50E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

cm244	3.37E-07	7.32E-09	3.54E-17	8.24E-34	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm245	4.44E-02	4.40E-02	4.22E-02	3.89E-02	3.31E-02	2.81E-02	2.39E-02	2.03E-02	1.72E-02	1.46E-02	1.35E-02
cm246	2.83E-03	2.79E-03	2.59E-03	2.24E-03	1.67E-03	1.24E-03	9.29E-04	6.93E-04	5.17E-04	3.85E-04	3.33E-04
cm247	3.24E-05	3.24E-05	3.24E-05	3.24E-05	3.24E-05	3.24E-05	3.24E-05	3.24E-05	3.24E-05	3.24E-05	3.24E-05
cm248	1.64E-06	1.64E-06	1.64E-06	1.64E-06	1.63E-06	1.62E-06	1.62E-06	1.61E-06	1.60E-06	1.60E-06	1.59E-06
cm249	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm250	2.93E-15	2.92E-15	2.86E-15	2.75E-15	2.54E-15	2.35E-15	2.17E-15	2.00E-15	1.85E-15	1.71E-15	1.64E-15
cm251	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk249	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk250	8.66E-24	8.62E-24	8.45E-24	8.12E-24	7.50E-24	6.92E-24	6.39E-24	5.90E-24	5.45E-24	5.03E-24	4.84E-24
bk251	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf249	8.41E-09	6.90E-09	2.57E-09	3.55E-10	6.80E-12	1.30E-13	2.49E-15	4.77E-17	9.13E-19	1.75E-20	2.42E-21
cf250	1.39E-18	3.13E-19	3.01E-19	2.90E-19	2.67E-19	2.47E-19	2.28E-19	2.10E-19	1.94E-19	1.79E-19	1.72E-19
cf251	6.27E-10	5.80E-10	3.94E-10	1.82E-10	3.89E-11	8.31E-12	1.77E-12	3.79E-13	8.10E-14	1.73E-14	7.99E-15
cf252	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf253	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf254	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es253	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
s250	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 87

0

nuclide concentrations, grams
basis =per B&W assembly, 0.409 mthm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
h 3	2.32E-12	8.40E-15	5.20E-27	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
li 6	7.49E-05	7.49E-05	7.49E-05	7.49E-05	7.49E-05	7.49E-05	7.49E-05	7.49E-05	7.49E-05	7.49E-05	7.49E-05
li 7	2.88E-06	2.88E-06	2.88E-06	2.88E-06	2.88E-06	2.88E-06	2.88E-06	2.88E-06	2.88E-06	2.88E-06	2.88E-06
be 9	5.54E-06	5.54E-06	5.54E-06	5.54E-06	5.54E-06	5.54E-06	5.54E-06	5.54E-06	5.54E-06	5.54E-06	5.54E-06
be 10	3.69E-05	3.69E-05	3.69E-05	3.69E-05	3.69E-05	3.68E-05	3.68E-05	3.68E-05	3.67E-05	3.67E-05	3.67E-05
c 14	7.12E-06	7.03E-06	6.62E-06	5.86E-06	4.60E-06	3.61E-06	2.84E-06	2.23E-06	1.75E-06	1.37E-06	1.22E-06
ni 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 66	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 66	1.75E-07	1.75E-07	1.75E-07	1.75E-07	1.75E-07	1.75E-07	1.75E-07	1.75E-07	1.75E-07	1.75E-07	1.75E-07
cu 67	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 67	2.32E-08	2.32E-08	2.32E-08	2.32E-08	2.32E-08	2.32E-08	2.32E-08	2.32E-08	2.32E-08	2.32E-08	2.32E-08
zn 68	2.07E-09	2.07E-09	2.07E-09	2.07E-09	2.07E-09	2.07E-09	2.07E-09	2.07E-09	2.07E-09	2.07E-09	2.07E-09
zn 69	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 69m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 69	7.63E-08	7.63E-08	7.63E-08	7.63E-08	7.63E-08	7.63E-08	7.63E-08	7.63E-08	7.63E-08	7.63E-08	7.63E-08
zn 70	2.03E-06	2.03E-06	2.03E-06	2.03E-06	2.03E-06	2.03E-06	2.03E-06	2.03E-06	2.03E-06	2.03E-06	2.03E-06
ga 70	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 70	2.79E-09	2.79E-09	2.79E-09	2.79E-09	2.79E-09	2.79E-09	2.79E-09	2.79E-09	2.79E-09	2.79E-09	2.79E-09
zn 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 71m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 71	2.00E-05	2.00E-05	2.00E-05	2.00E-05	2.00E-05	2.00E-05	2.00E-05	2.00E-05	2.00E-05	2.00E-05	2.00E-05
ge 71	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 71m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 72	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 72	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03

co 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 73	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73	4.09E-03	4.09E-03	4.09E-03	4.09E-03	4.09E-03	4.09E-03	4.09E-03	4.09E-03	4.09E-03	4.09E-03	4.09E-03
ge 73m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 74	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 74	3.49E-03	3.49E-03	3.49E-03	3.49E-03	3.49E-03	3.49E-03	3.49E-03	3.49E-03	3.49E-03	3.49E-03	3.49E-03
co 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 75	3.33E-02	3.33E-02	3.33E-02	3.33E-02	3.33E-02	3.33E-02	3.33E-02	3.33E-02	3.33E-02	3.33E-02	3.33E-02
ni 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 88

0 nuclide concentrations, grams

basis =per B&W assembly, 0.409 mthm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
zn 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 76	1.02E-01	1.02E-01	1.02E-01	1.02E-01	1.02E-01	1.02E-01	1.02E-01	1.02E-01	1.02E-01	1.02E-01	1.02E-01
as 76	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 76	6.31E-04	6.31E-04	6.31E-04	6.31E-04	6.31E-04	6.31E-04	6.31E-04	6.31E-04	6.31E-04	6.31E-04	6.31E-04
ni 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 77m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 77	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 77	2.33E-01	2.33E-01	2.33E-01	2.33E-01	2.33E-01	2.33E-01	2.33E-01	2.33E-01	2.33E-01	2.33E-01	2.33E-01
se 77m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 78	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 78	7.25E-01	7.25E-01	7.25E-01	7.25E-01	7.25E-01	7.25E-01	7.25E-01	7.25E-01	7.25E-01	7.25E-01	7.25E-01
cu 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 79	1.39E+00	1.39E+00	1.37E+00	1.34E+00	1.29E+00	1.24E+00	1.18E+00	1.14E+00	1.09E+00	1.04E+00	1.02E+00
se 79m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 79	1.18E-02	1.47E-02	2.92E-02	5.77E-02	1.13E-01	1.66E-01	2.17E-01	2.66E-01	3.13E-01	3.57E-01	3.79E-01
br 79m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 79	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

zn 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 80	3.93E+00	3.93E+00	3.93E+00	3.93E+00	3.93E+00	3.93E+00	3.93E+00	3.93E+00	3.93E+00	3.93E+00	3.93E+00
br 80	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 80m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 80	1.50E-05	1.50E-05	1.50E-05	1.50E-05	1.50E-05	1.50E-05	1.50E-05	1.50E-05	1.50E-05	1.50E-05	1.50E-05
cu 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 81	5.85E+00	5.85E+00	5.85E+00	5.85E+00	5.85E+00	5.85E+00	5.85E+00	5.85E+00	5.85E+00	5.85E+00	5.85E+00
kr 81	7.12E-07	7.11E-07	7.10E-07	7.08E-07	7.03E-07	6.99E-07	6.94E-07	6.90E-07	6.85E-07	6.81E-07	6.79E-07
kr 81m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 89

0 nuclide concentrations, grams
basis =per B&W assembly, 0.409 mthm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
ge 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 82m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 82	9.54E+00	9.54E+00	9.54E+00	9.54E+00	9.54E+00	9.54E+00	9.54E+00	9.54E+00	9.54E+00	9.54E+00	9.54E+00
br 82	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 82m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 82	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01	1.22E-01
zn 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 83	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 83	1.35E+01	1.35E+01	1.35E+01	1.35E+01	1.35E+01	1.35E+01	1.35E+01	1.35E+01	1.35E+01	1.35E+01	1.35E+01
kr 83m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 84	3.28E+01	3.28E+01	3.28E+01	3.28E+01	3.28E+01	3.28E+01	3.28E+01	3.28E+01	3.28E+01	3.28E+01	3.28E+01
ga 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 85	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 85	3.89E-11	6.05E-14	5.49E-28	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 85m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 85	3.46E+01	3.46E+01	3.46E+01	3.46E+01	3.46E+01	3.46E+01	3.46E+01	3.46E+01	3.46E+01	3.46E+01	3.46E+01
ge 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

br 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 86	5.55E+01	5.55E+01	5.55E+01	5.55E+01	5.55E+01	5.55E+01	5.55E+01	5.55E+01	5.55E+01	5.55E+01	5.55E+01
rb 86	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 86m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 86	6.45E-02	6.45E-02	6.45E-02	6.45E-02	6.45E-02	6.45E-02	6.45E-02	6.45E-02	6.45E-02	6.45E-02	6.45E-02
ge 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 87	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 87	7.25E+01	7.25E+01	7.25E+01	7.25E+01	7.25E+01	7.25E+01	7.25E+01	7.25E+01	7.25E+01	7.25E+01	7.25E+01
sr 87	3.07E-04	3.07E-04	3.07E-04	3.08E-04	3.11E-04	3.13E-04	3.15E-04	3.17E-04	3.19E-04	3.21E-04	3.22E-04
sr 87m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 90

0 nuclide concentrations, grams

basis =per B&W assembly, 0.409 mthm for grams

	Initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
br 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 88	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 88	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
as 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 89	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.39E+02
y 89m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 90	8.57E-03	7.30E-04	3.28E-09	6.62E-20	2.70E-41	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 90	2.23E-06	1.90E-07	8.52E-13	1.72E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90	1.70E+02	1.70E+02	1.70E+02	1.70E+02	1.70E+02	1.70E+02	1.70E+02	1.70E+02	1.70E+02	1.70E+02	1.70E+02
zr 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 91	1.79E+02	1.79E+02	1.79E+02	1.79E+02	1.79E+02	1.79E+02	1.79E+02	1.79E+02	1.79E+02	1.79E+02	1.79E+02
nb 91	1.77E-10	1.60E-10	9.63E-11	3.47E-11	4.52E-12	5.89E-13	7.67E-14	9.98E-15	1.30E-15	1.69E-16	6.10E-17
se 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 92	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

zr 92	1.89E+02	1.89E+02	1.89E+02	1.89E+02	1.89E+02	1.89E+02	1.89E+02	1.89E+02	1.89E+02	1.89E+02	1.89E+02
nb 92	3.28E-08	3.28E-08	3.28E-08	3.28E-08	3.28E-08	3.28E-08	3.28E-08	3.28E-08	3.28E-08	3.28E-08	3.28E-08
se 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 93	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 93	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02
nb 93	2.38E-02	3.01E-02	6.15E-02	1.24E-01	2.50E-01	3.76E-01	5.01E-01	6.26E-01	7.51E-01	8.77E-01	9.39E-01
nb 93m	1.46E-03	1.46E-03	1.46E-03	1.46E-03	1.46E-03	1.46E-03	1.46E-03	1.46E-03	1.46E-03	1.45E-03	1.45E-03
br 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 91

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nuclide concentrations, grams
basis =per B&W assembly, 0.409 mthm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
sr 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 94	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 94	2.23E+02	2.23E+02	2.23E+02	2.23E+02	2.23E+02	2.23E+02	2.23E+02	2.23E+02	2.23E+02	2.23E+02	2.23E+02
nb 94	1.23E-04	1.23E-04	1.21E-04	1.17E-04	1.09E-04	1.02E-04	9.50E-05	8.88E-05	8.29E-05	7.74E-05	7.48E-05
nb 94m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 95	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 95m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 95	2.24E+02	2.24E+02	2.24E+02	2.24E+02	2.24E+02	2.24E+02	2.24E+02	2.24E+02	2.24E+02	2.24E+02	2.24E+02
br 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 96	2.32E+02	2.32E+02	2.32E+02	2.32E+02	2.32E+02	2.32E+02	2.32E+02	2.32E+02	2.32E+02	2.32E+02	2.32E+02
nb 96	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 96	6.56E+00	6.56E+00	6.56E+00	6.56E+00	6.56E+00	6.56E+00	6.56E+00	6.56E+00	6.56E+00	6.56E+00	6.56E+00
kr 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 97	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 97m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 97	2.17E+02	2.17E+02	2.17E+02	2.17E+02	2.17E+02	2.17E+02	2.17E+02	2.17E+02	2.17E+02	2.17E+02	2.17E+02
kr 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 98	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 98m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 98	2.33E+02	2.33E+02	2.33E+02	2.33E+02	2.33E+02	2.33E+02	2.33E+02	2.33E+02	2.33E+02	2.33E+02	2.33E+02
tc 98	1.37E-03	1.37E-03	1.36E-03	1.36E-03	1.36E-03	1.36E-03	1.36E-03	1.36E-03	1.36E-03	1.36E-03	1.36E-03
rb 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

y 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 99m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 99	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc 99	2.30E+02	2.30E+02	2.30E+02	2.29E+02	2.28E+02	2.26E+02	2.25E+02	2.23E+02	2.22E+02	2.20E+02	2.19E+02
tc 99m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru 99	3.12E-01	3.87E-01	7.65E-01	1.52E+00	3.02E+00	4.51E+00	5.99E+00	7.46E+00	8.92E+00	1.04E+01	1.11E+01
rb100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 92

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nuclide concentrations, grams
basis =per B&W assembly, 0.409 mthm for grams

	Initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
zr100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb100m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo100	2.63E+02	2.63E+02	2.63E+02	2.63E+02	2.63E+02	2.63E+02	2.63E+02	2.63E+02	2.63E+02	2.63E+02	2.63E+02
tc100	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru100	1.89E+01	1.89E+01	1.89E+01	1.89E+01	1.89E+01	1.89E+01	1.89E+01	1.89E+01	1.89E+01	1.89E+01	1.89E+01
rb101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc101	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru101	2.18E+02	2.18E+02	2.18E+02	2.18E+02	2.18E+02	2.18E+02	2.18E+02	2.18E+02	2.18E+02	2.18E+02	2.18E+02
sr102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru102	2.10E+02	2.10E+02	2.10E+02	2.10E+02	2.10E+02	2.10E+02	2.10E+02	2.10E+02	2.10E+02	2.10E+02	2.10E+02
rh102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru103	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103	1.44E+02	1.44E+02	1.44E+02	1.44E+02	1.44E+02	1.44E+02	1.44E+02	1.44E+02	1.44E+02	1.44E+02	1.44E+02
rh103m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru104	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.39E+02
rh104	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd104	4.10E+01	4.10E+01	4.10E+01	4.10E+01	4.10E+01	4.10E+01	4.10E+01	4.10E+01	4.10E+01	4.10E+01	4.10E+01
y105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

zr105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd105	1.01E+02	1.01E+02	1.01E+02	1.01E+02	1.01E+02	1.01E+02	1.01E+02	1.01E+02	1.01E+02	1.01E+02	1.01E+02

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Part B B&W 15x15, 3.00wtX, 20gwd/mtu decay fission products page 93

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nuclide concentrations, grams
basis =per B&W assembly, 0.409 mthm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
y106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd106	7.94E+01	7.94E+01	7.94E+01	7.94E+01	7.94E+01	7.94E+01	7.94E+01	7.94E+01	7.94E+01	7.94E+01	7.94E+01
ag106	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh107	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd107	5.12E+01	5.12E+01	5.12E+01	5.12E+01	5.12E+01	5.12E+01	5.11E+01	5.11E+01	5.11E+01	5.11E+01	5.11E+01
pd107m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag107	2.19E-03	2.74E-03	5.47E-03	1.09E-02	2.18E-02	3.28E-02	4.37E-02	5.46E-02	6.55E-02	7.64E-02	8.18E-02
zr108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd108	3.25E+01	3.25E+01	3.25E+01	3.25E+01	3.25E+01	3.25E+01	3.25E+01	3.25E+01	3.25E+01	3.25E+01	3.25E+01
ag108	1.47E-14	8.49E-15	5.54E-16	2.36E-18	4.29E-23	7.79E-28	1.42E-32	2.57E-37	.00E+00	.00E+00	.00E+00
ag108m	4.75E-06	2.75E-06	1.80E-07	7.65E-10	1.39E-14	2.52E-19	4.59E-24	8.33E-29	1.51E-33	2.75E-38	1.17E-40
cd108	4.66E-05	4.67E-05	4.69E-05	4.70E-05	4.70E-05	4.70E-05	4.70E-05	4.70E-05	4.70E-05	4.70E-05	4.70E-05
zr109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109	2.19E+01	2.19E+01	2.19E+01	2.19E+01	2.19E+01	2.19E+01	2.19E+01	2.19E+01	2.19E+01	2.19E+01	2.19E+01
ag109m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd109	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

rh110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd110	9.65E+00	9.65E+00	9.65E+00	9.65E+00	9.65E+00	9.65E+00	9.65E+00	9.65E+00	9.65E+00	9.65E+00	9.65E+00
ag110	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag110m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 94

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nuclide concentrations, grams
basis =per B&W assembly, 0.409 mthm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
cd110	5.76E+00	5.76E+00	5.76E+00	5.76E+00	5.76E+00	5.76E+00	5.76E+00	5.76E+00	5.76E+00	5.76E+00	5.76E+00
nb111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111	5.04E+00	5.04E+00	5.04E+00	5.04E+00	5.04E+00	5.04E+00	5.04E+00	5.04E+00	5.04E+00	5.04E+00	5.04E+00
cd111m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag112	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd112	2.64E+00	2.64E+00	2.64E+00	2.64E+00	2.64E+00	2.64E+00	2.64E+00	2.64E+00	2.64E+00	2.64E+00	2.64E+00
mo113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd113	4.58E-02	4.58E-02	4.58E-02	4.58E-02	4.58E-02	4.58E-02	4.58E-02	4.58E-02	4.58E-02	4.58E-02	4.58E-02
cd113m	8.09E-11	5.93E-13	1.25E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in113	3.00E-02	3.00E-02	3.00E-02	3.00E-02	3.00E-02	3.00E-02	3.00E-02	3.00E-02	3.00E-02	3.00E-02	3.00E-02
in113m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd114	2.93E+00	2.93E+00	2.93E+00	2.93E+00	2.93E+00	2.93E+00	2.93E+00	2.93E+00	2.93E+00	2.93E+00	2.93E+00
in114	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn114	7.51E-05	7.51E-05	7.51E-05	7.51E-05	7.51E-05	7.51E-05	7.51E-05	7.51E-05	7.51E-05	7.51E-05	7.51E-05
mo115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

in115	4.59E-01	4.59E-01	4.59E-01	4.59E-01	4.59E-01	4.59E-01	4.59E-01	4.59E-01	4.59E-01	4.59E-01	4.59E-01
in115m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 95

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nuclide concentrations, grams
basis =per B&W assembly, 0.409 mthm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
sn115	4.57E-02	4.57E-02	4.57E-02	4.57E-02	4.57E-02	4.57E-02	4.57E-02	4.57E-02	4.57E-02	4.57E-02	4.57E-02
tc116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd116	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00
in116	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn116	4.77E-01	4.77E-01	4.77E-01	4.77E-01	4.77E-01	4.77E-01	4.77E-01	4.77E-01	4.77E-01	4.77E-01	4.77E-01
tc117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117	1.19E+00	1.19E+00	1.19E+00	1.19E+00	1.19E+00	1.19E+00	1.19E+00	1.19E+00	1.19E+00	1.19E+00	1.19E+00
sn117m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn118	9.73E-01	9.73E-01	9.73E-01	9.73E-01	9.73E-01	9.73E-01	9.73E-01	9.73E-01	9.73E-01	9.73E-01	9.73E-01
ru119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn119	1.03E+00	1.03E+00	1.03E+00	1.03E+00	1.03E+00	1.03E+00	1.03E+00	1.03E+00	1.03E+00	1.03E+00	1.03E+00
sn119m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn120	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00
rh121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 96

0 nuclide concentrations, grams
basis =per B&W assembly, 0.409 mthm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
pd121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn121	3.03E-09	8.60E-10	1.58E-12	5.32E-18	6.03E-29	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn121m	6.96E-05	1.98E-05	3.62E-08	1.22E-13	1.38E-24	1.57E-35	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb121	1.05E+00	1.05E+00	1.05E+00	1.05E+00	1.05E+00	1.05E+00	1.05E+00	1.05E+00	1.05E+00	1.05E+00	1.05E+00
rh122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn122	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00
sb122	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb122m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te122	4.69E-02	4.69E-02	4.69E-02	4.69E-02	4.69E-02	4.69E-02	4.69E-02	4.69E-02	4.69E-02	4.69E-02	4.69E-02
rh123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb123	1.23E+00	1.23E+00	1.23E+00	1.23E+00	1.23E+00	1.23E+00	1.23E+00	1.23E+00	1.23E+00	1.23E+00	1.23E+00
te123	3.68E-04	3.68E-04	3.68E-04	3.68E-04	3.68E-04	3.68E-04	3.68E-04	3.68E-04	3.68E-04	3.68E-04	3.68E-04
te123m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn124	2.20E+00	2.20E+00	2.20E+00	2.20E+00	2.20E+00	2.20E+00	2.20E+00	2.20E+00	2.20E+00	2.20E+00	2.20E+00
sb124	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb124m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te124	3.98E-02	3.98E-02	3.98E-02	3.98E-02	3.98E-02	3.98E-02	3.98E-02	3.98E-02	3.98E-02	3.98E-02	3.98E-02
pd125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb125	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te125	2.68E+00	2.68E+00	2.68E+00	2.68E+00	2.68E+00	2.68E+00	2.68E+00	2.68E+00	2.68E+00	2.68E+00	2.68E+00
te125m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in126	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn126	4.87E+00	4.87E+00	4.85E+00	4.82E+00	4.75E+00	4.69E+00	4.62E+00	4.56E+00	4.50E+00	4.43E+00	4.40E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 97

0 nuclide concentrations, grams
basis =per B&W assembly, 0.409 mthm for grams

	Initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
sb126	2.32E-07	2.31E-07	2.31E-07	2.29E-07	2.26E-07	2.23E-07	2.20E-07	2.17E-07	2.14E-07	2.11E-07	2.09E-07
sb126m	1.76E-09	1.76E-09	1.75E-09	1.74E-09	1.72E-09	1.69E-09	1.67E-09	1.65E-09	1.62E-09	1.60E-09	1.59E-09
te126	9.19E-02	9.53E-02	1.12E-01	1.46E-01	2.12E-01	2.77E-01	3.42E-01	4.06E-01	4.68E-01	5.30E-01	5.61E-01
xe126	1.22E-09	1.22E-09	1.22E-09	1.22E-09	1.22E-09	1.22E-09	1.22E-09	1.22E-09	1.22E-09	1.22E-09	1.22E-09
ag127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i127	1.12E+01	1.12E+01	1.12E+01	1.12E+01	1.12E+01	1.12E+01	1.12E+01	1.12E+01	1.12E+01	1.12E+01	1.12E+01
xe127	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te128	2.43E+01	2.43E+01	2.43E+01	2.43E+01	2.43E+01	2.43E+01	2.43E+01	2.43E+01	2.43E+01	2.43E+01	2.43E+01
i128	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe128	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01	3.97E-01
cd129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i129	4.99E+01	4.99E+01	4.99E+01	4.99E+01	4.99E+01	4.99E+01	4.99E+01	4.99E+01	4.99E+01	4.99E+01	4.99E+01
xe129	2.08E-03	2.30E-03	3.41E-03	5.61E-03	1.00E-02	1.44E-02	1.88E-02	2.33E-02	2.77E-02	3.21E-02	3.43E-02
xe129m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te130	1.01E+02	1.01E+02	1.01E+02	1.01E+02	1.01E+02	1.01E+02	1.01E+02	1.01E+02	1.01E+02	1.01E+02	1.01E+02
i130	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe130	1.16E+00	1.16E+00	1.16E+00	1.16E+00	1.16E+00	1.16E+00	1.16E+00	1.16E+00	1.16E+00	1.16E+00	1.16E+00
cd131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i131	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02
xe131m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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0 nuclide concentrations, grams
basis =per B&W assembly, 0.409 mthm for grams

	Initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
cd132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

sn132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe132	2.84E+02	2.84E+02	2.84E+02	2.84E+02	2.84E+02	2.84E+02	2.84E+02	2.84E+02	2.84E+02	2.84E+02	2.84E+02	2.84E+02
cs132	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba132	4.90E-05	4.90E-05	4.90E-05	4.90E-05	4.90E-05	4.90E-05	4.90E-05	4.90E-05	4.90E-05	4.90E-05	4.90E-05	4.90E-05
in133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs133	3.41E+02	3.41E+02	3.41E+02	3.41E+02	3.41E+02	3.41E+02	3.41E+02	3.41E+02	3.41E+02	3.41E+02	3.41E+02	3.41E+02
ba133	9.02E-20	1.24E-22	6.10E-37	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134	4.27E+02	4.27E+02	4.27E+02	4.27E+02	4.27E+02	4.27E+02	4.27E+02	4.27E+02	4.27E+02	4.27E+02	4.27E+02	4.27E+02
xe134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba134	2.98E+01	2.98E+01	2.98E+01	2.98E+01	2.98E+01	2.98E+01	2.98E+01	2.98E+01	2.98E+01	2.98E+01	2.98E+01	2.98E+01
sn135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs135	1.77E+02	1.77E+02	1.77E+02	1.77E+02	1.77E+02	1.77E+02	1.77E+02	1.77E+02	1.77E+02	1.76E+02	1.76E+02	
cs135m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135	5.95E-02	6.49E-02	9.16E-02	1.45E-01	2.52E-01	3.58E-01	4.65E-01	5.71E-01	6.78E-01	7.84E-01	8.37E-01	
ba135m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe136	5.61E+02	5.61E+02	5.61E+02	5.61E+02	5.61E+02	5.61E+02	5.61E+02	5.61E+02	5.61E+02	5.61E+02	5.61E+02	5.61E+02
cs136	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba136	4.78E+00	4.78E+00	4.78E+00	4.78E+00	4.78E+00	4.78E+00	4.78E+00	4.78E+00	4.78E+00	4.78E+00	4.78E+00	4.78E+00
ba136m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wtX, 20gwd/mtu decay fission products page 99

0 nuclide concentrations, grams
basis =per B&W assembly, 0.409 mthm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
sb137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe137	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs137	3.35E-02	3.32E-03	3.19E-08	2.94E-18	2.50E-38	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

ba137	3.60E+02	3.60E+02	3.60E+02	3.60E+02	3.60E+02	3.60E+02	3.60E+02	3.60E+02	3.60E+02	3.60E+02	3.60E+02
ba137m	5.11E-09	5.07E-10	4.87E-15	4.49E-25	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba138	3.65E+02	3.65E+02	3.65E+02	3.65E+02	3.65E+02	3.65E+02	3.65E+02	3.65E+02	3.65E+02	3.65E+02	3.65E+02
la138	2.18E-03	2.18E-03	2.18E-03	2.18E-03	2.18E-03	2.18E-03	2.18E-03	2.18E-03	2.18E-03	2.18E-03	2.18E-03
sb139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la139	3.47E+02	3.47E+02	3.47E+02	3.47E+02	3.47E+02	3.47E+02	3.47E+02	3.47E+02	3.47E+02	3.47E+02	3.47E+02
ce139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr139	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce140	3.67E+02	3.67E+02	3.67E+02	3.67E+02	3.67E+02	3.67E+02	3.67E+02	3.67E+02	3.67E+02	3.67E+02	3.67E+02
pr140	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr141	3.21E+02	3.21E+02	3.21E+02	3.21E+02	3.21E+02	3.21E+02	3.21E+02	3.21E+02	3.21E+02	3.21E+02	3.21E+02
nd141	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce142	3.23E+02	3.23E+02	3.23E+02	3.23E+02	3.23E+02	3.23E+02	3.23E+02	3.23E+02	3.23E+02	3.23E+02	3.23E+02
pr142	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr142m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd142	3.24E+00	3.24E+00	3.24E+00	3.24E+00	3.24E+00	3.24E+00	3.24E+00	3.24E+00	3.24E+00	3.24E+00	3.24E+00
i143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 100

0 nuclide concentrations, grams
basis =per B&W assembly, 0.409 mthm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
xe143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr143	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd143	2.69E+02	2.69E+02	2.69E+02	2.69E+02	2.69E+02	2.69E+02	2.69E+02	2.69E+02	2.69E+02	2.69E+02	2.69E+02
i144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

xe144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd144	3.42E+02	3.42E+02	3.42E+02	3.42E+02	3.42E+02	3.42E+02	3.42E+02	3.42E+02	3.42E+02	3.42E+02	3.42E+02
i145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd145	2.03E+02	2.03E+02	2.03E+02	2.03E+02	2.03E+02	2.03E+02	2.03E+02	2.03E+02	2.03E+02	2.03E+02	2.03E+02
pm145	2.79E-11	5.55E-13	1.74E-21	1.71E-38	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm145	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr146	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd146	1.87E+02	1.87E+02	1.87E+02	1.87E+02	1.87E+02	1.87E+02	1.87E+02	1.87E+02	1.87E+02	1.87E+02	1.87E+02
pm146	3.12E-25	1.12E-30	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm146	2.58E-03	2.58E-03	2.58E-03	2.58E-03	2.58E-03	2.58E-03	2.58E-03	2.58E-03	2.58E-03	2.58E-03	2.58E-03
xe147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm147	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm147	8.97E+01	8.97E+01	8.97E+01	8.97E+01	8.97E+01	8.97E+01	8.97E+01	8.97E+01	8.97E+01	8.97E+01	8.97E+01
cs148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd148	1.03E+02	1.03E+02	1.03E+02	1.03E+02	1.03E+02	1.03E+02	1.03E+02	1.03E+02	1.03E+02	1.03E+02	1.03E+02
pm148	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 101

0 nuclide concentrations, grams

basis =per B&W assembly, 0.409 mthm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
sm148	2.89E+01	2.89E+01	2.89E+01	2.89E+01	2.89E+01	2.89E+01	2.89E+01	2.89E+01	2.89E+01	2.89E+01	2.89E+01
cs149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm149	1.42E+00	1.42E+00	1.42E+00	1.42E+00	1.42E+00	1.42E+00	1.42E+00	1.42E+00	1.42E+00	1.42E+00	1.42E+00
eu149	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

ba150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd150	4.85E+01	4.85E+01	4.85E+01	4.85E+01	4.85E+01	4.85E+01	4.85E+01	4.85E+01	4.85E+01	4.85E+01	4.85E+01
pm150	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm150	8.04E+01	8.04E+01	8.04E+01	8.04E+01	8.04E+01	8.04E+01	8.04E+01	8.04E+01	8.04E+01	8.04E+01	8.04E+01
eu150	9.29E-11	1.34E-11	8.38E-16	3.28E-24	5.02E-41	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm151	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm151	2.85E-01	1.32E-01	2.80E-03	1.26E-06	2.58E-13	5.26E-20	1.07E-26	2.19E-33	4.46E-40	.00E+00	.00E+00
eu151	5.93E+00	6.08E+00	6.21E+00	6.22E+00	6.22E+00	6.22E+00	6.22E+00	6.22E+00	6.22E+00	6.22E+00	6.22E+00
ba152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm152	3.74E+01	3.74E+01	3.74E+01	3.74E+01	3.74E+01	3.74E+01	3.74E+01	3.74E+01	3.74E+01	3.74E+01	3.74E+01
eu152	2.45E-11	1.35E-13	6.85E-25	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu152m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd152	3.19E-02	3.19E-02	3.19E-02	3.19E-02	3.19E-02	3.19E-02	3.19E-02	3.19E-02	3.19E-02	3.19E-02	3.19E-02
la153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu153	2.70E+01	2.70E+01	2.70E+01	2.70E+01	2.70E+01	2.70E+01	2.70E+01	2.70E+01	2.70E+01	2.70E+01	2.70E+01
gd153	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wt%, 20gwd/mtu decay fission products page 102

0 nuclide concentrations, grams
basis =per B&W assembly, 0.409 mthm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
sm154	9.08E+00	9.08E+00	9.08E+00	9.08E+00	9.08E+00	9.08E+00	9.08E+00	9.08E+00	9.08E+00	9.08E+00	9.08E+00
eu154	7.01E-14	2.19E-17	6.59E-35	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd154	7.93E+00	7.93E+00	7.93E+00	7.93E+00	7.93E+00	7.93E+00	7.93E+00	7.93E+00	7.93E+00	7.93E+00	7.93E+00
la155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm155	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu155	5.82E-26	2.15E-32	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155	3.18E+00	3.18E+00	3.18E+00	3.18E+00	3.18E+00	3.18E+00	3.18E+00	3.18E+00	3.18E+00	3.18E+00	3.18E+00
ce156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

nd156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu156	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd156	9.32E+00	9.32E+00	9.32E+00	9.32E+00	9.32E+00	9.32E+00	9.32E+00	9.32E+00	9.32E+00	9.32E+00	9.32E+00	9.32E+00
ce157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu157	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd157	3.11E-02	3.11E-02	3.11E-02	3.11E-02	3.11E-02	3.11E-02	3.11E-02	3.11E-02	3.11E-02	3.11E-02	3.11E-02	3.11E-02
pr158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu158	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd158	3.25E+00	3.25E+00	3.25E+00	3.25E+00	3.25E+00	3.25E+00	3.25E+00	3.25E+00	3.25E+00	3.25E+00	3.25E+00	3.25E+00
pr159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd159	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb159	5.03E-01	5.03E-01	5.03E-01	5.03E-01	5.03E-01	5.03E-01	5.03E-01	5.03E-01	5.03E-01	5.03E-01	5.03E-01	5.03E-01
nd160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd160	2.25E-01	2.25E-01	2.25E-01	2.25E-01	2.25E-01	2.25E-01	2.25E-01	2.25E-01	2.25E-01	2.25E-01	2.25E-01	2.25E-01
tb160	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy160	3.93E-02	3.93E-02	3.93E-02	3.93E-02	3.93E-02	3.93E-02	3.93E-02	3.93E-02	3.93E-02	3.93E-02	3.93E-02	3.93E-02
nd161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb161	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part B B&W 15x15, 3.00wtX, 20gwd/mtu decay fission products page 103

0 nuclide concentrations, grams
basis =per B&W assembly, 0.409 mthm for grams

	initial	500.0 yr	1000.0 yr	2000.0 yr	4000.0 yr	6000.0 yr	8000.0 yr	10000.0 yr	12000.0 yr	14000.0 yr	15000.0 yr
dy161	8.27E-02	8.27E-02	8.27E-02	8.27E-02	8.27E-02	8.27E-02	8.27E-02	8.27E-02	8.27E-02	8.27E-02	8.27E-02
pm162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy162	5.62E-02	5.62E-02	5.62E-02	5.62E-02	5.62E-02	5.62E-02	5.62E-02	5.62E-02	5.62E-02	5.62E-02	5.62E-02
sm163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy163	3.66E-02	3.66E-02	3.66E-02	3.66E-02	3.66E-02	3.66E-02	3.66E-02	3.66E-02	3.66E-02	3.66E-02	3.66E-02
sm164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

tb164	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy164	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02
sm165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho165	9.50E-03	9.50E-03	9.50E-03	9.50E-03	9.50E-03	9.50E-03	9.50E-03	9.50E-03	9.50E-03	9.50E-03	9.50E-03
dy166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166m	1.89E-05	1.78E-05	1.34E-05	7.50E-06	2.36E-06	7.44E-07	2.34E-07	7.38E-08	2.32E-08	7.32E-09	4.11E-09
er166	1.55E-03	1.56E-03	1.56E-03	1.57E-03	1.57E-03	1.57E-03	1.57E-03	1.57E-03	1.57E-03	1.57E-03	1.57E-03
er167	2.44E-05	2.44E-05	2.44E-05	2.44E-05	2.44E-05	2.44E-05	2.44E-05	2.44E-05	2.44E-05	2.44E-05	2.44E-05
er167m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er168	2.01E-05	2.01E-05	2.01E-05	2.01E-05	2.01E-05	2.01E-05	2.01E-05	2.01E-05	2.01E-05	2.01E-05	2.01E-05
yb168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm169	7.41E-07	7.41E-07	7.41E-07	7.41E-07	7.41E-07	7.41E-07	7.41E-07	7.41E-07	7.41E-07	7.41E-07	7.41E-07
yb169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er170	7.89E-07	7.89E-07	7.89E-07	7.89E-07	7.89E-07	7.89E-07	7.89E-07	7.89E-07	7.89E-07	7.89E-07	7.89E-07
tm170	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb170	4.62E-09	4.62E-09	4.62E-09	4.62E-09	4.62E-09	4.62E-09	4.62E-09	4.62E-09	4.62E-09	4.62E-09	4.62E-09
er171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm171	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb171	1.05E-06	1.05E-06	1.05E-06	1.05E-06	1.05E-06	1.05E-06	1.05E-06	1.05E-06	1.05E-06	1.05E-06	1.05E-06
er172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm172	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb172	6.73E-07	6.73E-07	6.73E-07	6.73E-07	6.73E-07	6.73E-07	6.73E-07	6.73E-07	6.73E-07	6.73E-07	6.73E-07
total	9.58E+03	9.58E+03	9.58E+03	9.58E+03	9.58E+03	9.58E+03	9.58E+03	9.58E+03	9.58E+03	9.58E+03	9.58E+03

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Part D 1000 year criticality at 2.182 kw/package actinides page 142
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+01mwd, flux= 2.86E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
he 4	3.35E+01	3.35E+01	3.45E+01	3.55E+01	3.65E+01	3.74E+01	3.83E+01	3.91E+01	3.99E+01	4.07E+01	4.14E+01
tl206	4.85E-16	4.85E-16	5.17E-16	5.49E-16	5.81E-16	6.13E-16	6.44E-16	6.75E-16	7.06E-16	7.37E-16	7.67E-16
tl207	2.59E-11	2.59E-11	2.70E-11	2.82E-11	2.94E-11	3.05E-11	3.16E-11	3.27E-11	3.38E-11	3.49E-11	3.60E-11
tl208	7.78E-13	5.96E-13	6.55E-16	6.21E-16	6.25E-16	6.30E-16	6.35E-16	6.40E-16	6.45E-16	6.50E-16	6.55E-16
tl209	5.88E-13	5.89E-13	6.49E-13	7.12E-13	7.76E-13	8.41E-13	9.08E-13	9.75E-13	1.04E-12	1.11E-12	1.18E-12
pb206	2.31E-01	2.32E-01	2.64E-01	2.99E-01	3.37E-01	3.76E-01	4.18E-01	4.61E-01	5.07E-01	5.55E-01	6.04E-01
pb207	1.42E-02	1.43E-02	1.62E-02	1.84E-02	2.06E-02	2.28E-02	2.52E-02	2.77E-02	3.02E-02	3.29E-02	3.56E-02
pb208	6.93E-04	7.00E-04	7.20E-04	7.21E-04	7.21E-04	7.21E-04	7.21E-04	7.22E-04	7.22E-04	7.22E-04	7.22E-04
pb209	2.48E-09	2.49E-09	2.74E-09	3.01E-09	3.28E-09	3.55E-09	3.83E-09	4.12E-09	4.41E-09	4.70E-09	4.99E-09
pb210	1.05E-03	1.05E-03	1.12E-03	1.18E-03	1.25E-03	1.32E-03	1.39E-03	1.46E-03	1.52E-03	1.59E-03	1.65E-03
pb211	2.00E-10	2.00E-10	2.09E-10	2.18E-10	2.27E-10	2.36E-10	2.45E-10	2.53E-10	2.62E-10	2.70E-10	2.78E-10
pb212	4.61E-10	3.53E-10	3.88E-13	3.68E-13	3.71E-13	3.74E-13	3.76E-13	3.79E-13	3.82E-13	3.85E-13	3.88E-13
pb214	2.44E-09	2.44E-09	2.60E-09	2.76E-09	2.92E-09	3.08E-09	3.24E-09	3.39E-09	3.55E-09	3.70E-09	3.85E-09
bi208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi209	2.67E-02	2.69E-02	3.16E-02	3.70E-02	4.28E-02	4.92E-02	5.61E-02	6.35E-02	7.15E-02	8.00E-02	8.91E-02
bi210m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210	6.44E-07	6.44E-07	6.86E-07	7.29E-07	7.71E-07	8.14E-07	8.55E-07	8.97E-07	9.37E-07	9.78E-07	1.02E-06
bi211	1.19E-11	1.19E-11	1.24E-11	1.29E-11	1.35E-11	1.40E-11	1.45E-11	1.50E-11	1.55E-11	1.60E-11	1.65E-11
bi212	4.38E-11	3.35E-11	3.68E-14	3.49E-14	3.52E-14	3.54E-14	3.57E-14	3.60E-14	3.63E-14	3.65E-14	3.68E-14
bi213	5.91E-10	5.93E-10	6.52E-10	7.16E-10	7.80E-10	8.46E-10	9.13E-10	9.81E-10	1.05E-09	1.12E-09	1.19E-09
bi214	1.81E-09	1.81E-09	1.93E-09	2.05E-09	2.17E-09	2.29E-09	2.40E-09	2.52E-09	2.63E-09	2.75E-09	2.86E-09
po210	1.78E-05	1.78E-05	1.90E-05	2.01E-05	2.13E-05	2.25E-05	2.36E-05	2.48E-05	2.59E-05	2.70E-05	2.81E-05
po211m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
po211	1.31E-16	1.31E-16	1.37E-16	1.43E-16	1.49E-16	1.55E-16	1.60E-16	1.66E-16	1.71E-16	1.77E-16	1.82E-16
po212	2.30E-21	1.76E-21	1.94E-24	1.83E-24	1.85E-24	1.86E-24	1.88E-24	1.89E-24	1.91E-24	1.92E-24	1.93E-24
po213	8.88E-19	8.91E-19	9.81E-19	1.08E-18	1.17E-18	1.27E-18	1.37E-18	1.47E-18	1.58E-18	1.68E-18	1.79E-18
po214	2.49E-16	2.49E-16	2.65E-16	2.82E-16	2.98E-16	3.15E-16	3.31E-16	3.47E-16	3.62E-16	3.78E-16	3.93E-16
po215	1.67E-16	1.68E-16	1.75E-16	1.83E-16	1.90E-16	1.97E-16	2.05E-16	2.12E-16	2.19E-16	2.26E-16	2.33E-16
po216	1.78E-15	1.36E-15	1.50E-18	1.42E-18	1.43E-18	1.44E-18	1.45E-18	1.46E-18	1.47E-18	1.49E-18	1.50E-18
po218	2.87E-10	2.88E-10	3.06E-10	3.25E-10	3.44E-10	3.63E-10	3.81E-10	4.00E-10	4.18E-10	4.36E-10	4.54E-10
at217	7.11E-15	7.13E-15	7.85E-15	8.61E-15	9.39E-15	1.02E-14	1.10E-14	1.18E-14	1.26E-14	1.35E-14	1.43E-14
rn218	3.40E-26	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rn219	3.80E-13	3.80E-13	3.97E-13	4.14E-13	4.31E-13	4.48E-13	4.64E-13	4.80E-13	4.96E-13	5.12E-13	5.28E-13
rn220	6.95E-13	5.32E-13	5.85E-16	5.54E-16	5.59E-16	5.63E-16	5.67E-16	5.71E-16	5.76E-16	5.80E-16	5.85E-16
rn222	5.19E-07	5.20E-07	5.54E-07	5.88E-07	6.22E-07	6.56E-07	6.90E-07	7.23E-07	7.56E-07	7.89E-07	8.21E-07
fr221	6.59E-11	6.61E-11	7.28E-11	7.98E-11	8.70E-11	9.44E-11	1.02E-10	1.09E-10	1.17E-10	1.25E-10	1.33E-10
fr223	1.76E-12	1.76E-12	1.84E-12	1.92E-12	2.00E-12	2.08E-12	2.15E-12	2.23E-12	2.30E-12	2.38E-12	2.45E-12
ra222	3.76E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ra223	9.64E-08	9.65E-08	1.01E-07	1.05E-07	1.09E-07	1.14E-07	1.18E-07	1.22E-07	1.26E-07	1.30E-07	1.34E-07
ra224	4.02E-09	3.08E-09	3.39E-12	3.21E-12	3.23E-12	3.26E-12	3.28E-12	3.31E-12	3.33E-12	3.36E-12	3.39E-12
ra225	2.92E-07	2.93E-07	3.22E-07	3.54E-07	3.85E-07	4.18E-07	4.51E-07	4.84E-07	5.18E-07	5.53E-07	5.87E-07
ra226	8.08E-02	8.09E-02	8.61E-02	9.15E-02	9.68E-02	1.02E-01	1.07E-01	1.13E-01	1.18E-01	1.23E-01	1.28E-01
ra228	3.29E-10	3.29E-10	3.52E-10	3.75E-10	3.98E-10	4.21E-10	4.45E-10	4.68E-10	4.92E-10	5.16E-10	5.39E-10
ac225	1.97E-07	1.98E-07	2.18E-07	2.39E-07	2.60E-07	2.82E-07	3.05E-07	3.27E-07	3.50E-07	3.73E-07	3.97E-07
ac227	6.83E-05	6.83E-05	7.14E-05	7.44E-05	7.75E-05	8.05E-05	8.34E-05	8.64E-05	8.93E-05	9.21E-05	9.49E-05
ac228	4.01E-14	4.02E-14	4.29E-14	4.57E-14	4.86E-14	5.14E-14	5.43E-14	5.71E-14	6.00E-14	6.29E-14	6.58E-14
th226	1.87E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th227	1.58E-07	1.59E-07	1.66E-07	1.73E-07	1.80E-07	1.87E-07	1.94E-07	2.00E-07	2.07E-07	2.14E-07	2.20E-07
th228	7.82E-07	5.99E-07	6.58E-10	6.24E-10	6.28E-10	6.33E-10	6.38E-10	6.43E-10	6.48E-10	6.53E-10	6.58E-10
th229	5.78E-02	5.79E-02	6.38E-02	7.00E-02	7.63E-02	8.27E-02	8.92E-02	9.59E-02	1.03E-01	1.09E-01	1.16E-01
th230	4.47E+00	4.48E+00	4.73E+00	4.98E+00	5.23E+00	5.48E+00	5.72E+00	5.97E+00	6.21E+00	6.44E+00	6.68E+00
th231	9.32E-08	2.94E-08	2.96E-08	2.98E-08	2.99E-08	3.01E-08	3.03E-08	3.05E-08	3.06E-08	3.08E-08	3.09E-08

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Part D 1000 year criticality at 2.182 kw/package actinides page 143
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+01mwd, flux= 2.86E+08n/cm**2-sec

0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
th232	8.17E-01	8.19E-01	8.74E-01	9.32E-01	9.90E-01	1.05E+00	1.11E+00	1.16E+00	1.22E+00	1.28E+00	1.34E+00
th233	1.12E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th234	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06
pa231	1.04E-01	1.05E-01	1.09E-01	1.14E-01	1.19E-01	1.23E-01	1.28E-01	1.32E-01	1.37E-01	1.41E-01	1.45E-01
pa232	1.37E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pa233	1.84E-05	1.84E-05	1.84E-05	1.84E-05	1.84E-05	1.84E-05	1.84E-05	1.84E-05	1.84E-05	1.84E-05	1.84E-05
pa234m	2.17E-10	2.17E-10	2.17E-10	2.17E-10	2.17E-10	2.17E-10	2.17E-10	2.17E-10	2.17E-10	2.17E-10	2.17E-10
pa234	9.68E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11
pa235	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u230	1.84E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u231	9.58E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u232	2.90E-05	2.16E-05	2.01E-08	1.85E-08	1.84E-08	1.83E-08	1.82E-08	1.81E-08	1.80E-08	1.79E-08	1.78E-08
u233	2.58E+00	2.58E+00	2.74E+00	2.90E+00	3.06E+00	3.22E+00	3.37E+00	3.53E+00	3.69E+00	3.84E+00	4.00E+00
u234	1.08E+02	1.08E+02	1.08E+02	1.08E+02	1.07E+02	1.07E+02	1.07E+02	1.07E+02	1.06E+02	1.06E+02	1.06E+02
u235	7.23E+03	7.23E+03	7.27E+03	7.32E+03	7.36E+03	7.41E+03	7.45E+03	7.49E+03	7.53E+03	7.57E+03	7.60E+03
u236	1.96E+03	1.96E+03	1.97E+03	1.98E+03	1.99E+03	2.00E+03	2.01E+03	2.02E+03	2.02E+03	2.03E+03	2.03E+03
u237	3.51E-05	2.24E-10	5.68E-13	5.24E-13	4.83E-13	4.45E-13	4.10E-13	3.78E-13	3.48E-13	3.21E-13	2.96E-13
u238	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05
u239	1.95E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u240	9.41E-19	9.42E-19	1.00E-18	1.06E-18	1.12E-18	1.18E-18	1.24E-18	1.30E-18	1.36E-18	1.42E-18	1.48E-18
u241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np235	3.81E-10	1.80E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236m	1.75E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236	3.53E-04	3.53E-04	3.51E-04	3.49E-04	3.47E-04	3.45E-04	3.43E-04	3.41E-04	3.39E-04	3.37E-04	3.34E-04
np237	5.41E+02	5.41E+02	5.42E+02	5.41E+02	5.41E+02	5.41E+02	5.41E+02	5.41E+02	5.41E+02	5.40E+02	5.40E+02
np238	1.11E-05	2.98E-11	2.53E-13	1.85E-15	1.36E-17	9.96E-20	7.30E-22	5.35E-24	3.92E-26	2.87E-28	2.11E-30
np239	2.85E-04	2.06E-06	1.88E-06	1.71E-06	1.56E-06	1.42E-06	1.29E-06	1.17E-06	1.07E-06	9.73E-07	8.86E-07
np240m	8.03E-21	8.04E-21	8.54E-21	9.05E-21	9.56E-21	1.01E-20	1.06E-20	1.11E-20	1.16E-20	1.21E-20	1.26E-20
np240	7.99E-14	8.27E-23	8.78E-23	9.31E-23	9.83E-23	1.04E-22	1.09E-22	1.14E-22	1.19E-22	1.24E-22	1.30E-22
np241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu236	9.57E-08	8.66E-10	7.88E-10	7.83E-10	7.78E-10	7.74E-10	7.69E-10	7.64E-10	7.60E-10	7.55E-10	7.51E-10
pu237	5.15E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu238	1.69E-01	1.33E-01	6.31E-05	2.85E-08	4.84E-11	2.95E-13	2.14E-15	1.57E-17	1.15E-19	8.42E-22	6.17E-24
pu239	1.68E+03	1.68E+03	1.63E+03	1.58E+03	1.54E+03	1.50E+03	1.45E+03	1.41E+03	1.37E+03	1.33E+03	1.30E+03
pu240	1.30E+02	1.29E+02	1.17E+02	1.05E+02	9.43E+01	8.49E+01	7.64E+01	6.87E+01	6.18E+01	5.56E+01	5.01E+01
pu241	3.14E-02	7.38E-03	1.88E-05	1.73E-05	1.59E-05	1.47E-05	1.35E-05	1.25E-05	1.15E-05	1.06E-05	9.77E-06
pu242	6.86E+01	6.86E+01	6.85E+01	6.84E+01	6.82E+01	6.81E+01	6.80E+01	6.79E+01	6.77E+01	6.76E+01	6.75E+01
pu243	1.43E-07	1.12E-15	1.12E-15	1.12E-15	1.12E-15	1.12E-15	1.12E-15	1.12E-15	1.12E-15	1.12E-15	1.12E-15
pu244	4.76E-08	4.77E-08	5.07E-08	5.37E-08	5.67E-08	5.97E-08	6.27E-08	6.57E-08	6.87E-08	7.17E-08	7.47E-08
pu245	6.31E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu246	6.61E-22	6.60E-22	6.35E-22	6.10E-22	5.86E-22	5.63E-22	5.41E-22	5.20E-22	5.00E-22	4.80E-22	4.62E-22
am239	1.90E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am240	8.18E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am241	7.54E-01	7.42E-01	1.59E-01	3.24E-02	6.92E-03	1.75E-03	6.85E-04	4.44E-04	3.71E-04	3.35E-04	3.07E-04
am242m	1.90E-04	1.64E-04	1.39E-06	1.02E-08	7.47E-11	5.47E-13	4.01E-15	2.94E-17	2.15E-19	1.58E-21	1.16E-23
am242	1.68E-08	2.11E-09	1.79E-11	1.31E-13	9.63E-16	7.06E-18	5.17E-20	3.79E-22	2.78E-24	2.04E-26	1.49E-28
am243	2.40E+00	2.39E+00	2.18E+00	1.99E+00	1.81E+00	1.65E+00	1.50E+00	1.36E+00	1.24E+00	1.13E+00	1.03E+00
am244m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am244	1.33E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am245	1.28E-19	2.25E-31	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am246	1.65E-24	1.65E-24	1.59E-24	1.52E-24	1.46E-24	1.41E-24	1.35E-24	1.30E-24	1.25E-24	1.20E-24	1.15E-24
cm241	1.40E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

1 Part D 1000 year criticality at 2.182 kw/package actinides page 144
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+01mwd, flux= 2.86E+08n/cm**2-sec

0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
cm242	3.40E-06	4.26E-07	3.62E-09	2.65E-11	1.95E-13	1.43E-15	1.04E-17	7.66E-20	5.61E-22	4.11E-24	3.01E-26
cm243	8.37E-11	4.03E-11	2.29E-21	6.25E-32	1.70E-42	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm244	2.09E-04	6.64E-05	4.88E-21	1.14E-37	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm245	1.22E-02	1.22E-02	1.13E-02	1.04E-02	9.58E-03	8.83E-03	8.14E-03	7.50E-03	6.91E-03	6.37E-03	5.87E-03
cm246	3.14E-04	3.13E-04	2.71E-04	2.34E-04	2.02E-04	1.75E-04	1.51E-04	1.30E-04	1.13E-04	9.73E-05	8.40E-05
cm247	3.23E-05	3.23E-05	3.23E-05	3.23E-05	3.23E-05	3.23E-05	3.23E-05	3.23E-05	3.23E-05	3.23E-05	3.23E-05
cm248	1.65E-06	1.65E-06	1.65E-06	1.64E-06	1.64E-06	1.64E-06	1.63E-06	1.63E-06	1.63E-06	1.62E-06	1.62E-06
cm249	1.67E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm250	1.57E-15	1.57E-15	1.51E-15	1.45E-15	1.40E-15	1.34E-15	1.29E-15	1.24E-15	1.19E-15	1.14E-15	1.10E-15
cm251	6.95E-28	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk249	1.20E-12	5.92E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk250	7.02E-21	4.64E-24	4.47E-24	4.29E-24	4.13E-24	3.96E-24	3.81E-24	3.66E-24	3.52E-24	3.38E-24	3.25E-24
bk251	2.36E-27	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf249	4.06E-10	3.84E-10	5.64E-11	7.80E-12	1.08E-12	1.49E-13	2.07E-14	2.86E-15	3.95E-16	5.47E-17	7.57E-18
cf250	1.68E-14	3.43E-15	1.59E-19	1.53E-19	1.47E-19	1.41E-19	1.36E-19	1.30E-19	1.25E-19	1.21E-19	1.16E-19
cf251	3.87E-15	3.78E-15	1.79E-15	8.27E-16	3.82E-16	1.77E-16	8.16E-17	3.77E-17	1.74E-17	8.06E-18	3.72E-18
cf252	2.80E-19	1.08E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf253	4.73E-27	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf254	6.71E-35	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es253	5.42E-27	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254	9.75E-33	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
s250	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05

1

se 88	3.05E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 151

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+01mwd, flux= 2.86E+08n/cm**2-sec

0 nuclide concentrations, grams

basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
br 88	1.69E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 88	1.87E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 88	1.99E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 88	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
as 89	2.41E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 89	2.98E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 89	3.10E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 89	4.44E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 89	2.27E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 89	1.10E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02
y 89m	3.76E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 90	1.70E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 90	6.80E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 90	7.30E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 90	8.21E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90	3.58E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90m	1.83E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 90	2.72E-02	1.30E-02	5.48E-13	1.11E-23	2.23E-34	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 90	7.07E-06	3.37E-06	1.42E-16	2.87E-27	4.20E-38	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 90m	6.41E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90	1.71E+02	1.71E+02	1.71E+02	1.71E+02	1.71E+02	1.71E+02	1.71E+02	1.71E+02	1.71E+02	1.71E+02	1.71E+02
zr 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 91	4.18E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

br 91	7.97E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 91	1.51E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	1.78E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 91	1.11E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91	1.64E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91m	5.61E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 91	1.80E+02	1.80E+02	1.80E+02	1.80E+02	1.80E+02	1.80E+02	1.80E+02	1.80E+02	1.80E+02	1.80E+02	1.80E+02
nb 91	1.34E-11	1.30E-11	4.82E-12	1.74E-12	6.28E-13	2.26E-13	8.17E-14	2.95E-14	1.06E-14	3.84E-15	1.38E-15
se 92	2.10E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 92	8.08E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 92	1.74E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 92	1.21E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 92	3.32E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 92	4.37E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 92	1.90E+02	1.90E+02	1.90E+02	1.90E+02	1.90E+02	1.90E+02	1.90E+02	1.90E+02	1.90E+02	1.90E+02	1.90E+02
nb 92	7.12E-08	7.12E-08	7.12E-08	7.12E-08	7.12E-08	7.12E-08	7.12E-08	7.12E-08	7.12E-08	7.12E-08	7.12E-08
se 93	8.65E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 93	7.93E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 93	4.15E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 93	1.24E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 93	1.68E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 93	9.32E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 93	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02
nb 93	1.00E+00	1.00E+00	1.06E+00	1.13E+00	1.19E+00	1.25E+00	1.31E+00	1.38E+00	1.44E+00	1.50E+00	1.56E+00
nb 93m	1.46E-03	1.46E-03	1.46E-03	1.46E-03	1.46E-03	1.46E-03	1.46E-03	1.45E-03	1.45E-03	1.45E-03	1.45E-03
br 94	3.12E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 94	3.05E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 94	3.01E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 152
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+01mwd, flux= 2.86E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sr 94	2.82E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 94	4.53E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 94	2.24E+02	2.24E+02	2.24E+02	2.24E+02	2.24E+02	2.24E+02	2.24E+02	2.24E+02	2.24E+02	2.24E+02	2.24E+02
nb 94	1.02E-04	1.02E-04	9.85E-05	9.51E-05	9.20E-05	8.89E-05	8.59E-05	8.30E-05	8.02E-05	7.75E-05	7.49E-05
nb 94m	5.29E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 95	3.36E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 95	9.25E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 95	2.07E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 95	8.49E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 95	2.63E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 95	2.34E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 95	1.28E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 95m	1.47E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 95	2.25E+02	2.25E+02	2.25E+02	2.25E+02	2.25E+02	2.25E+02	2.25E+02	2.25E+02	2.25E+02	2.25E+02	2.25E+02
br 96	6.32E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 96	6.35E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 96	2.72E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 96	2.64E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 96	2.37E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 96	2.33E+02	2.33E+02	2.33E+02	2.33E+02	2.33E+02	2.33E+02	2.33E+02	2.33E+02	2.33E+02	2.33E+02	2.33E+02
nb 96	9.12E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 96	6.63E+00	6.63E+00	6.63E+00	6.63E+00	6.63E+00	6.63E+00	6.63E+00	6.63E+00	6.63E+00	6.63E+00	6.63E+00
kr 97	2.84E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 97	7.10E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 97	5.39E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 97	1.16E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

zr 97	2.45E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 97	1.75E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 97m	2.29E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 97	2.18E+02	2.18E+02	2.18E+02	2.18E+02	2.18E+02	2.18E+02	2.18E+02	2.18E+02	2.18E+02	2.18E+02	2.18E+02
kr 98	1.64E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 98	3.93E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 98	3.34E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 98	1.58E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 98	1.31E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 98	1.23E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 98m	8.97E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 98	2.34E+02	2.34E+02	2.34E+02	2.34E+02	2.34E+02	2.34E+02	2.34E+02	2.34E+02	2.34E+02	2.34E+02	2.34E+02
tc 98	1.37E-03	1.37E-03	1.37E-03	1.37E-03	1.37E-03	1.37E-03	1.37E-03	1.37E-03	1.37E-03	1.37E-03	1.37E-03
rb 99	6.07E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 99	6.01E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 99	2.33E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 99	8.79E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 99	4.06E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 99m	2.89E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 99	1.10E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc 99	2.20E+02	2.20E+02	2.19E+02	2.18E+02	2.17E+02	2.17E+02	2.16E+02	2.15E+02	2.15E+02	2.14E+02	2.13E+02
tc 99m	8.79E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru 99	1.18E+01	1.18E+01	1.25E+01	1.32E+01	1.40E+01	1.47E+01	1.54E+01	1.61E+01	1.68E+01	1.75E+01	1.82E+01
rb100	3.09E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr100	4.92E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y100	3.44E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 153
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+01mwd, flux= 2.86E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
zr100	3.01E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb100	6.82E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb100m	9.24E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo100	2.65E+02	2.65E+02	2.65E+02	2.65E+02	2.65E+02	2.65E+02	2.65E+02	2.65E+02	2.65E+02	2.65E+02	2.65E+02
tc100	1.12E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru100	1.91E+01	1.91E+01	1.91E+01	1.91E+01	1.91E+01	1.91E+01	1.91E+01	1.91E+01	1.91E+01	1.91E+01	1.91E+01
rb101	2.45E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr101	7.67E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y101	1.34E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr101	4.77E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb101	2.82E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo101	3.65E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc101	3.55E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru101	2.19E+02	2.19E+02	2.19E+02	2.19E+02	2.19E+02	2.19E+02	2.19E+02	2.19E+02	2.19E+02	2.19E+02	2.19E+02
sr102	2.12E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y102	1.28E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr102	4.99E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb102	4.29E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo102	2.59E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102	2.02E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102m	9.36E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru102	2.11E+02	2.11E+02	2.11E+02	2.11E+02	2.11E+02	2.11E+02	2.11E+02	2.11E+02	2.11E+02	2.11E+02	2.11E+02
rh102	1.11E-08	8.55E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr103	6.19E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y103	1.14E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr103	7.75E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb103	3.46E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

mo103	2.35E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc103	1.92E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru103	1.21E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103	1.44E+02	1.44E+02	1.44E+02	1.44E+02	1.44E+02	1.44E+02	1.44E+02	1.44E+02	1.44E+02	1.44E+02	1.44E+02
rh103m	1.20E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr104	2.67E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y104	1.11E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr104	4.17E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb104	4.59E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo104	1.53E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc104	2.93E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru104	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.39E+02	1.39E+02
rh104	8.02E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104m	3.61E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd104	4.14E+01	4.14E+01	4.14E+01	4.14E+01	4.14E+01	4.14E+01	4.14E+01	4.14E+01	4.14E+01	4.14E+01	4.14E+01
y105	1.62E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr105	2.98E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb105	1.10E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo105	6.24E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc105	9.43E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru105	3.35E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105	2.67E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105m	2.68E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd105	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02

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Part D 1000 year criticality at 2.182 kw/package fission products page 154
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+01mwd, flux= 2.86E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
y106	1.78E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr106	1.76E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb106	5.50E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo106	7.15E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc106	4.71E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru106	4.67E-04	6.20E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106	4.33E-10	5.76E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106m	5.08E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd106	7.98E+01	7.98E+01	7.98E+01	7.98E+01	7.98E+01	7.98E+01	7.98E+01	7.98E+01	7.98E+01	7.98E+01	7.98E+01
ag106	2.31E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y107	1.69E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr107	4.66E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb107	6.80E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo107	1.07E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc107	1.74E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru107	2.29E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh107	1.33E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd107	5.13E+01	5.13E+01	5.13E+01	5.13E+01	5.13E+01	5.13E+01	5.13E+01	5.13E+01	5.13E+01	5.13E+01	5.13E+01
pd107m	1.60E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag107	8.73E-02	8.74E-02	9.27E-02	9.82E-02	1.04E-01	1.09E-01	1.15E-01	1.20E-01	1.26E-01	1.31E-01	1.36E-01
zr108	3.02E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb108	6.23E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo108	5.26E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc108	1.26E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru108	1.67E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108	1.05E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108m	4.36E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd108	3.27E+01	3.27E+01	3.27E+01	3.27E+01	3.27E+01	3.27E+01	3.27E+01	3.27E+01	3.27E+01	3.27E+01	3.27E+01
ag108	2.51E-13	2.23E-16	1.12E-18	4.77E-21	2.03E-23	8.66E-26	3.69E-28	1.57E-30	6.71E-33	2.86E-35	1.22E-37
ag108m	8.51E-08	7.22E-08	3.63E-10	1.55E-12	6.59E-15	2.81E-17	1.20E-19	5.10E-22	2.17E-24	9.26E-27	3.95E-29

cd108	8.33E-05	8.33E-05	8.33E-05	8.33E-05	8.33E-05	8.33E-05	8.33E-05	8.33E-05	8.33E-05	8.33E-05	8.33E-05
zr109	8.46E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb109	3.57E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo109	5.25E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc109	1.16E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru109	1.54E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109	4.19E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109m	1.31E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109	2.99E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109m	9.26E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109	2.19E+01	2.19E+01	2.19E+01	2.19E+01	2.19E+01	2.19E+01	2.19E+01	2.19E+01	2.19E+01	2.19E+01	2.19E+01
ag109m	2.40E-10	2.17E-25	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd109	2.96E-12	2.19E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb110	6.75E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo110	1.15E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc110	9.02E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru110	1.89E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110	8.26E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110m	4.34E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd110	9.69E+00	9.69E+00	9.69E+00	9.69E+00	9.69E+00	9.69E+00	9.69E+00	9.69E+00	9.69E+00	9.69E+00	9.69E+00
ag110	7.02E-11	2.34E-27	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag110m	2.43E-06	1.51E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 155
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+01mwd, flux= 2.86E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
cd110	5.82E+00	5.82E+00	5.82E+00	5.82E+00	5.82E+00	5.82E+00	5.82E+00	5.82E+00	5.82E+00	5.82E+00	5.82E+00
nb111	8.22E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo111	2.11E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc111	4.36E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru111	6.48E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh111	9.79E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111	1.35E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111m	1.01E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111	6.24E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111m	6.25E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111	5.07E+00	5.07E+00	5.07E+00	5.07E+00	5.07E+00	5.07E+00	5.07E+00	5.07E+00	5.07E+00	5.07E+00	5.07E+00
cd111m	3.73E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb112	1.57E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo112	7.30E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc112	1.91E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru112	5.36E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh112	5.74E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd112	3.68E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag112	5.50E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd112	2.65E+00	2.65E+00	2.65E+00	2.65E+00	2.65E+00	2.65E+00	2.65E+00	2.65E+00	2.65E+00	2.65E+00	2.65E+00
mo113	3.58E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc113	8.01E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru113	1.53E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh113	1.72E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd113	2.74E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113	5.55E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113m	3.97E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd113	4.17E-02	4.17E-02	4.17E-02	4.17E-02	4.17E-02	4.17E-02	4.17E-02	4.17E-02	4.17E-02	4.17E-02	4.17E-02
cd113m	2.97E-06	6.79E-07	1.33E-27	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in113	3.01E-02	3.01E-02	3.01E-02	3.01E-02	3.01E-02	3.01E-02	3.01E-02	3.01E-02	3.01E-02	3.01E-02	3.01E-02
in113m	1.98E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo114	3.06E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

tc114	4.30E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru114	1.76E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh114	1.85E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd114	3.78E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag114	1.23E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd114	2.95E+00	2.95E+00	2.95E+00	2.95E+00	2.95E+00	2.95E+00	2.95E+00	2.95E+00	2.95E+00	2.95E+00	2.95E+00
in114	5.20E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114m	2.33E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn114	9.08E-05	9.08E-05	9.08E-05	9.08E-05	9.08E-05	9.08E-05	9.08E-05	9.08E-05	9.08E-05	9.08E-05	9.08E-05
mo115	4.63E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc115	2.16E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru115	4.74E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh115	3.96E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd115	6.26E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115	1.56E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115m	9.83E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115	3.54E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115m	3.31E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in115	4.59E-01	4.59E-01	4.59E-01	4.59E-01	4.59E-01	4.59E-01	4.59E-01	4.59E-01	4.59E-01	4.59E-01	4.59E-01
in115m	2.97E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 156
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+01mwd, flux= 2.86E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sn115	4.58E-02	4.58E-02	4.58E-02	4.58E-02	4.58E-02	4.58E-02	4.58E-02	4.58E-02	4.58E-02	4.58E-02	4.58E-02
tc116	3.98E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru116	3.27E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh116	2.53E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd116	2.54E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116	3.66E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116m	2.82E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd116	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00
in116	5.04E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116m	4.37E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn116	4.81E-01	4.81E-01	4.81E-01	4.81E-01	4.81E-01	4.81E-01	4.81E-01	4.81E-01	4.81E-01	4.81E-01	4.81E-01
tc117	6.53E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru117	1.04E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh117	1.25E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd117	6.60E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117	8.25E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117m	6.05E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117	1.78E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117m	5.44E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117	3.88E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117m	1.27E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117	1.19E+00	1.19E+00	1.19E+00	1.19E+00	1.19E+00	1.19E+00	1.19E+00	1.19E+00	1.19E+00	1.19E+00	1.19E+00
sn117m	1.33E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc118	1.05E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru118	3.31E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh118	7.79E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd118	1.97E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118	4.14E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118m	1.56E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd118	5.77E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118	9.57E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118m	6.12E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn118	9.77E-01	9.77E-01	9.77E-01	9.77E-01	9.77E-01	9.77E-01	9.77E-01	9.77E-01	9.77E-01	9.77E-01	9.77E-01
ru119	1.30E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

te124	4.01E-02	4.01E-02	4.01E-02	4.01E-02	4.01E-02	4.01E-02	4.01E-02	4.01E-02	4.01E-02	4.01E-02	4.01E-02
pd125	1.13E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag125	1.75E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd125	2.24E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125	5.40E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125m	2.12E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125	1.10E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125m	2.34E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb125	4.69E-05	2.31E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te125	2.69E+00	2.69E+00	2.69E+00	2.69E+00	2.69E+00	2.69E+00	2.69E+00	2.69E+00	2.69E+00	2.69E+00	2.69E+00
te125m	6.28E-07	3.28E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd126	3.82E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag126	2.98E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd126	8.17E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in126	7.60E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn126	4.40E+00	4.40E+00	4.37E+00	4.34E+00	4.31E+00	4.28E+00	4.25E+00	4.22E+00	4.19E+00	4.16E+00	4.13E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 158
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+01mwd, flux= 2.86E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sb126	2.16E-07	2.09E-07	2.07E-07	2.06E-07	2.05E-07	2.03E-07	2.02E-07	2.00E-07	1.99E-07	1.98E-07	1.96E-07
sb126m	1.60E-09	1.59E-09	1.58E-09	1.57E-09	1.56E-09	1.54E-09	1.53E-09	1.52E-09	1.51E-09	1.50E-09	1.49E-09
te126	5.92E-01	5.93E-01	6.22E-01	6.52E-01	6.82E-01	7.12E-01	7.42E-01	7.71E-01	8.00E-01	8.29E-01	8.58E-01
xe126	1.23E-09	1.23E-09	1.23E-09	1.23E-09	1.23E-09	1.23E-09	1.23E-09	1.23E-09	1.23E-09	1.23E-09	1.23E-09
ag127	2.05E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd127	6.93E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127	5.47E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127m	1.79E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127	7.02E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127m	3.11E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb127	7.69E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127	7.76E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127m	3.82E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i127	1.12E+01	1.12E+01	1.12E+01	1.12E+01	1.12E+01	1.12E+01	1.12E+01	1.12E+01	1.12E+01	1.12E+01	1.12E+01
xe127	2.30E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag128	5.65E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd128	1.32E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in128	8.80E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn128	1.50E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128	1.37E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128m	2.78E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te128	2.45E+01	2.45E+01	2.45E+01	2.45E+01	2.45E+01	2.45E+01	2.45E+01	2.45E+01	2.45E+01	2.45E+01	2.45E+01
i128	2.88E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe128	4.01E-01	4.01E-01	4.01E-01	4.01E-01	4.01E-01	4.01E-01	4.01E-01	4.01E-01	4.01E-01	4.01E-01	4.01E-01
cd129	1.86E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in129	6.67E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129	4.81E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129m	1.58E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb129	1.54E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129	3.85E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129m	5.39E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i129	5.01E+01	5.01E+01	5.01E+01	5.01E+01	5.01E+01	5.01E+01	5.01E+01	5.01E+01	5.01E+01	5.01E+01	5.01E+01
xe129	3.65E-02	3.65E-02	3.87E-02	4.09E-02	4.31E-02	4.53E-02	4.75E-02	4.98E-02	5.20E-02	5.42E-02	5.64E-02
xe129m	3.25E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd130	1.13E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in130	2.86E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn130	2.45E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130	7.72E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

sb130m	5.53E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te130	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02
i130	2.10E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130m	1.35E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe130	1.17E+00	1.17E+00	1.17E+00	1.17E+00	1.17E+00	1.17E+00	1.17E+00	1.17E+00	1.17E+00	1.17E+00	1.17E+00
cd131	3.87E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in131	1.01E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn131	3.61E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb131	3.56E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131	4.10E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131m	6.34E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i131	2.22E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02	1.38E+02
xe131m	3.60E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 159
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+01mwd, flux= 2.86E+08n/cm**2-sec
0
nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
cd132	6.10E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in132	1.89E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn132	2.98E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132	3.74E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132m	2.56E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te132	1.31E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i132	3.89E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe132	2.86E+02	2.86E+02	2.86E+02	2.86E+02	2.86E+02	2.86E+02	2.86E+02	2.86E+02	2.86E+02	2.86E+02	2.86E+02
cs132	5.86E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba132	4.94E-05	4.94E-05	4.94E-05	4.94E-05	4.94E-05	4.94E-05	4.94E-05	4.94E-05	4.94E-05	4.94E-05	4.94E-05
in133	3.43E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn133	3.02E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb133	3.33E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133	2.81E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133m	1.03E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133	5.11E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133m	4.43E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133	3.11E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133m	4.00E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs133	3.42E+02	3.42E+02	3.42E+02	3.42E+02	3.42E+02	3.42E+02	3.42E+02	3.42E+02	3.42E+02	3.42E+02	3.42E+02
ba133	2.05E-12	2.84E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in134	4.16E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn134	3.60E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134	3.56E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134m	2.97E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te134	1.59E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134	2.44E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134m	1.31E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134	4.29E+02	4.29E+02	4.29E+02	4.29E+02	4.29E+02	4.29E+02	4.29E+02	4.29E+02	4.29E+02	4.29E+02	4.29E+02
xe134m	3.58E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134	8.22E-04	3.43E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134m	1.01E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba134	3.00E+01	3.00E+01	3.00E+01	3.00E+01	3.00E+01	3.00E+01	3.00E+01	3.00E+01	3.00E+01	3.00E+01	3.00E+01
sn135	1.25E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb135	3.10E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te135	6.24E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i135	1.55E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135	2.33E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135m	1.26E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs135	1.78E+02	1.78E+02	1.78E+02	1.78E+02	1.78E+02	1.78E+02	1.78E+02	1.78E+02	1.77E+02	1.77E+02	1.77E+02

cs135m	6.65E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135	8.93E-01	8.94E-01	9.46E-01	1.00E+00	1.05E+00	1.11E+00	1.16E+00	1.21E+00	1.27E+00	1.32E+00	1.37E+00
ba135m	1.56E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn136	1.91E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb136	2.32E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te136	2.67E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136	2.59E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136m	6.98E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe136	5.63E+02	5.63E+02	5.63E+02	5.63E+02	5.63E+02	5.63E+02	5.63E+02	5.63E+02	5.63E+02	5.63E+02	5.63E+02
cs136	1.94E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba136	4.82E+00	4.82E+00	4.82E+00	4.82E+00	4.82E+00	4.82E+00	4.82E+00	4.82E+00	4.82E+00	4.82E+00	4.82E+00
ba136m	5.88E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 160
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+01mwd, flux= 2.86E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sb137	1.75E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te137	1.80E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i137	8.03E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe137	1.46E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs137	6.32E-02	3.16E-02	5.82E-12	5.37E-22	4.95E-32	4.61E-42	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba137	3.62E+02	3.62E+02	3.62E+02	3.62E+02	3.62E+02	3.62E+02	3.62E+02	3.62E+02	3.62E+02	3.62E+02	3.62E+02
ba137m	9.65E-09	4.82E-09	8.89E-19	8.20E-29	7.55E-39	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb138	6.81E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te138	1.69E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i138	1.07E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe138	5.22E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138	1.28E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138m	4.36E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba138	3.66E+02	3.66E+02	3.66E+02	3.66E+02	3.66E+02	3.66E+02	3.66E+02	3.66E+02	3.66E+02	3.66E+02	3.66E+02
la138	2.19E-03	2.19E-03	2.19E-03	2.19E-03	2.19E-03	2.19E-03	2.19E-03	2.19E-03	2.19E-03	2.19E-03	2.19E-03
sb139	6.64E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te139	1.12E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i139	2.04E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe139	1.89E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs139	3.50E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba139	3.26E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la139	3.48E+02	3.48E+02	3.48E+02	3.48E+02	3.48E+02	3.48E+02	3.48E+02	3.48E+02	3.48E+02	3.48E+02	3.48E+02
ce139	4.66E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr139	3.20E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te140	2.64E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i140	1.81E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe140	4.61E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs140	1.43E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba140	7.07E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la140	9.48E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce140	3.68E+02	3.68E+02	3.68E+02	3.68E+02	3.68E+02	3.68E+02	3.68E+02	3.68E+02	3.68E+02	3.68E+02	3.68E+02
pr140	1.44E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te141	9.35E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i141	1.27E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe141	2.24E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs141	1.10E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba141	6.52E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la141	8.45E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce141	1.68E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr141	3.22E+02	3.22E+02	3.22E+02	3.22E+02	3.22E+02	3.22E+02	3.22E+02	3.22E+02	3.22E+02	3.22E+02	3.22E+02
nd141	8.21E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te142	7.42E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

i142	1.31E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe142	6.19E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs142	4.40E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba142	3.65E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la142	3.24E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce142	3.25E+02	3.25E+02	3.25E+02	3.25E+02	3.25E+02	3.25E+02	3.25E+02	3.25E+02	3.25E+02	3.25E+02	3.25E+02
pr142	1.02E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr142m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd142	3.27E+00	3.27E+00	3.27E+00	3.27E+00	3.27E+00	3.27E+00	3.27E+00	3.27E+00	3.27E+00	3.27E+00	3.27E+00
i143	3.64E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 161
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+01mwd, flux= 2.86E+08n/cm**2-sec
0
nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
xe143	7.15E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs143	2.43E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba143	7.31E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la143	4.90E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce143	6.91E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr143	6.82E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd143	2.70E+02	2.70E+02	2.70E+02	2.70E+02	2.70E+02	2.70E+02	2.70E+02	2.70E+02	2.70E+02	2.70E+02	2.70E+02
i144	5.34E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe144	1.74E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs144	3.92E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba144	4.61E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la144	2.12E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce144	1.30E-03	3.46E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144	5.50E-08	1.46E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144m	3.21E-10	8.50E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd144	3.44E+02	3.44E+02	3.44E+02	3.44E+02	3.44E+02	3.44E+02	3.44E+02	3.44E+02	3.44E+02	3.44E+02	3.44E+02
i145	2.25E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe145	1.39E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs145	5.39E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba145	7.66E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la145	8.87E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce145	7.17E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr145	8.56E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd145	2.04E+02	2.04E+02	2.04E+02	2.04E+02	2.04E+02	2.04E+02	2.04E+02	2.04E+02	2.04E+02	2.04E+02	2.04E+02
pm145	1.41E-07	4.58E-08	1.46E-24	1.42E-41	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm145	7.27E-09	1.45E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe146	8.09E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs146	7.54E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba146	2.11E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la146	1.48E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce146	2.54E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr146	4.57E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd146	1.88E+02	1.88E+02	1.88E+02	1.88E+02	1.88E+02	1.88E+02	1.88E+02	1.88E+02	1.88E+02	1.88E+02	1.88E+02
pm146	8.93E-10	2.08E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm146	2.64E-03	2.64E-03	2.64E-03	2.64E-03	2.64E-03	2.64E-03	2.64E-03	2.64E-03	2.64E-03	2.64E-03	2.64E-03
xe147	9.12E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs147	2.45E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba147	1.02E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la147	4.33E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce147	1.32E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr147	2.01E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd147	2.35E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm147	2.05E-03	7.50E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm147	9.01E+01	9.01E+01	9.01E+01	9.01E+01	9.01E+01	9.01E+01	9.01E+01	9.01E+01	9.01E+01	9.01E+01	9.01E+01

cs148	1.69E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba148	1.74E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la148	3.21E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce148	9.27E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr148	2.57E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd148	1.03E+02	1.03E+02	1.03E+02	1.03E+02	1.03E+02	1.03E+02	1.03E+02	1.03E+02	1.03E+02	1.03E+02	1.03E+02
pm148	1.30E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148m	1.03E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 162
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+01mwd, flux= 2.86E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sm148	2.91E+01	2.91E+01	2.91E+01	2.91E+01	2.91E+01	2.91E+01	2.91E+01	2.91E+01	2.91E+01	2.91E+01	2.91E+01
cs149	1.68E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba149	2.22E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la149	2.06E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce149	4.40E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr149	1.72E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd149	8.38E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm149	2.58E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm149	1.18E+00	1.18E+00	1.18E+00	1.18E+00	1.18E+00	1.18E+00	1.18E+00	1.18E+00	1.18E+00	1.18E+00	1.18E+00
eu149	1.76E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs150	1.10E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba150	2.80E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la150	8.38E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce150	1.45E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr150	4.71E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd150	4.87E+01	4.87E+01	4.87E+01	4.87E+01	4.87E+01	4.87E+01	4.87E+01	4.87E+01	4.87E+01	4.87E+01	4.87E+01
pm150	4.22E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm150	8.08E+01	8.08E+01	8.08E+01	8.08E+01	8.08E+01	8.08E+01	8.08E+01	8.08E+01	8.08E+01	8.08E+01	8.08E+01
eu150	3.06E-08	1.71E-08	1.20E-16	4.68E-25	1.83E-33	7.15E-42	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba151	9.87E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la151	1.69E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce151	1.02E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr151	7.28E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd151	4.82E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm151	6.69E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm151	3.01E-02	2.39E-02	1.36E-05	6.14E-09	2.77E-12	1.25E-15	5.65E-19	2.55E-22	1.15E-25	5.21E-29	2.35E-32
eu151	6.12E+00	6.12E+00	6.15E+00	6.15E+00	6.15E+00	6.15E+00	6.15E+00	6.15E+00	6.15E+00	6.15E+00	6.15E+00
ba152	2.67E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la152	5.52E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce152	7.23E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr152	7.83E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd152	2.87E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152	1.07E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152m	6.68E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm152	3.75E+01	3.75E+01	3.75E+01	3.75E+01	3.75E+01	3.75E+01	3.75E+01	3.75E+01	3.75E+01	3.75E+01	3.75E+01
eu152	3.74E-03	7.86E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu152m	1.62E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd152	1.62E-01	1.63E-01	1.63E-01	1.63E-01	1.63E-01	1.63E-01	1.63E-01	1.63E-01	1.63E-01	1.63E-01	1.63E-01
la153	6.39E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce153	6.92E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr153	2.28E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd153	1.59E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm153	9.19E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm153	2.13E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu153	2.71E+01	2.71E+01	2.71E+01	2.71E+01	2.71E+01	2.71E+01	2.71E+01	2.71E+01	2.71E+01	2.71E+01	2.71E+01
gd153	1.34E-07	2.95E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

la154	7.68E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce154	9.64E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr154	9.37E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd154	4.27E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154	1.40E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154m	4.62E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 163

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+01mwd, flux= 2.86E+08n/cm**2-sec

0 nuclide concentrations, grams

basis =B&W 15x15, 3.00wtX, 20gwd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sm154	9.12E+00	9.12E+00	9.12E+00	9.12E+00	9.12E+00	9.12E+00	9.12E+00	9.12E+00	9.12E+00	9.12E+00	9.12E+00
eu154	1.72E-03	1.53E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd154	8.06E+00	8.06E+00	8.06E+00	8.06E+00	8.06E+00	8.06E+00	8.06E+00	8.06E+00	8.06E+00	8.06E+00	8.06E+00
la155	4.05E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce155	2.24E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr155	2.20E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd155	6.35E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm155	3.94E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm155	1.36E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu155	1.50E-04	1.76E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155	2.73E+00	2.73E+00	2.73E+00	2.73E+00	2.73E+00	2.73E+00	2.73E+00	2.73E+00	2.73E+00	2.73E+00	2.73E+00
ce156	1.99E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr156	1.01E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd156	2.17E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm156	4.90E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm156	2.02E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu156	7.92E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd156	9.80E+00	9.80E+00	9.80E+00	9.80E+00	9.80E+00	9.80E+00	9.80E+00	9.80E+00	9.80E+00	9.80E+00	9.80E+00
ce157	3.48E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr157	1.62E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd157	6.37E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm157	9.06E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm157	1.67E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu157	1.98E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd157	2.36E-02	2.36E-02	2.36E-02	2.36E-02	2.36E-02	2.36E-02	2.36E-02	2.36E-02	2.36E-02	2.36E-02	2.36E-02
pr158	3.87E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd158	1.18E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm158	1.32E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm158	5.51E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu158	5.29E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd158	3.27E+00	3.27E+00	3.27E+00	3.27E+00	3.27E+00	3.27E+00	3.27E+00	3.27E+00	3.27E+00	3.27E+00	3.27E+00
pr159	1.80E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd159	2.58E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm159	2.09E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm159	9.87E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu159	9.93E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd159	7.76E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb159	5.05E-01	5.05E-01	5.05E-01	5.05E-01	5.05E-01	5.05E-01	5.05E-01	5.05E-01	5.05E-01	5.05E-01	5.05E-01
nd160	2.10E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm160	5.62E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm160	1.26E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu160	1.64E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd160	2.26E-01	2.26E-01	2.26E-01	2.26E-01	2.26E-01	2.26E-01	2.26E-01	2.26E-01	2.26E-01	2.26E-01	2.26E-01
tb160	1.57E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy160	3.97E-02	3.97E-02	3.97E-02	3.97E-02	3.97E-02	3.97E-02	3.97E-02	3.97E-02	3.97E-02	3.97E-02	3.97E-02
nd161	3.47E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm161	7.38E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

sm161	1.58E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu161	5.81E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd161	4.56E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb161	1.25E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part D 1000 year criticality at 2.182 kw/package fission products page 164
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+01mwd, flux= 2.86E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	16030.0 yr	17000.0 yr	18000.0 yr	19000.0 yr	20000.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
dy161	8.28E-02	8.28E-02	8.28E-02	8.28E-02	8.28E-02	8.28E-02	8.28E-02	8.28E-02	8.28E-02	8.28E-02	8.28E-02
pm162	2.05E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm162	2.87E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu162	5.99E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd162	4.82E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162	4.54E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162m	1.63E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy162	5.65E-02	5.65E-02	5.65E-02	5.65E-02	5.65E-02	5.65E-02	5.65E-02	5.65E-02	5.65E-02	5.65E-02	5.65E-02
sm163	5.34E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu163	5.28E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd163	3.14E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163	4.64E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy163	3.68E-02	3.68E-02	3.68E-02	3.68E-02	3.68E-02	3.68E-02	3.68E-02	3.68E-02	3.68E-02	3.68E-02	3.68E-02
sm164	4.34E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu164	1.22E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd164	1.31E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb164	2.63E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy164	1.01E-02	1.01E-02	1.01E-02	1.01E-02	1.01E-02	1.01E-02	1.01E-02	1.01E-02	1.01E-02	1.01E-02	1.01E-02
sm165	7.48E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu165	1.17E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd165	9.17E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb165	6.47E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165	5.13E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165m	3.49E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho165	9.61E-03	9.61E-03	9.61E-03	9.61E-03	9.61E-03	9.61E-03	9.61E-03	9.61E-03	9.61E-03	9.61E-03	9.61E-03
dy166	2.74E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166	8.47E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166m	2.23E-07	2.19E-07	1.25E-07	7.02E-08	3.94E-08	2.21E-08	1.24E-08	6.96E-09	3.91E-09	2.19E-09	1.23E-09
er166	1.59E-03	1.59E-03	1.59E-03	1.59E-03	1.59E-03	1.59E-03	1.59E-03	1.59E-03	1.59E-03	1.59E-03	1.59E-03
er167	2.48E-05	2.48E-05	2.48E-05	2.48E-05	2.48E-05	2.48E-05	2.48E-05	2.48E-05	2.48E-05	2.48E-05	2.48E-05
er167m	7.05E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er168	2.05E-05	2.05E-05	2.05E-05	2.05E-05	2.05E-05	2.05E-05	2.05E-05	2.05E-05	2.05E-05	2.05E-05	2.05E-05
yb168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er169	1.33E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm169	7.45E-07	7.45E-07	7.45E-07	7.45E-07	7.45E-07	7.45E-07	7.45E-07	7.45E-07	7.45E-07	7.45E-07	7.45E-07
yb169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er170	7.93E-07	7.93E-07	7.93E-07	7.93E-07	7.93E-07	7.93E-07	7.93E-07	7.93E-07	7.93E-07	7.93E-07	7.93E-07
tm170	1.15E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb170	4.64E-09	4.64E-09	4.64E-09	4.64E-09	4.64E-09	4.64E-09	4.64E-09	4.64E-09	4.64E-09	4.64E-09	4.64E-09
er171	6.07E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm171	1.39E-11	2.75E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb171	1.06E-06	1.06E-06	1.06E-06	1.06E-06	1.06E-06	1.06E-06	1.06E-06	1.06E-06	1.06E-06	1.06E-06	1.06E-06
er172	2.36E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm172	3.21E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb172	6.76E-07	6.76E-07	6.76E-07	6.76E-07	6.76E-07	6.76E-07	6.76E-07	6.76E-07	6.76E-07	6.76E-07	6.76E-07
total	9.62E+03	9.62E+03	9.62E+03	9.62E+03	9.62E+03	9.62E+03	9.62E+03	9.62E+03	9.62E+03	9.62E+03	9.62E+03

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Part E 5000 year criticality at 2.182 kw/package actinides page 142
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.8976E+02mwd, flux= 2.90E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
he 4	3.77E+01	3.77E+01	3.86E+01	3.95E+01	4.03E+01	4.12E+01	4.19E+01
tl206	6.10E-16	6.10E-16	6.41E-16	6.72E-16	7.04E-16	7.35E-16	7.67E-16
tl207	4.63E-11	4.64E-11	4.71E-11	4.78E-11	4.86E-11	4.93E-11	5.01E-11
tl208	1.37E-12	1.05E-12	7.98E-16	7.34E-16	7.38E-16	7.43E-16	7.47E-16
tl209	8.37E-13	8.39E-13	9.02E-13	9.68E-13	1.03E-12	1.10E-12	1.17E-12
pb206	3.76E-01	3.77E-01	4.17E-01	4.60E-01	5.06E-01	5.54E-01	6.03E-01
pb207	2.52E-02	2.53E-02	2.88E-02	3.24E-02	3.61E-02	3.99E-02	4.37E-02
pb208	2.11E-03	2.12E-03	2.16E-03	2.16E-03	2.16E-03	2.16E-03	2.16E-03
pb209	3.54E-09	3.54E-09	3.81E-09	4.09E-09	4.37E-09	4.66E-09	4.95E-09
pb210	1.32E-03	1.32E-03	1.38E-03	1.45E-03	1.52E-03	1.59E-03	1.65E-03
pb211	3.58E-10	3.59E-10	3.64E-10	3.70E-10	3.76E-10	3.82E-10	3.87E-10
pb212	8.15E-10	6.23E-10	4.73E-13	4.35E-13	4.38E-13	4.40E-13	4.43E-13
pb214	3.06E-09	3.07E-09	3.22E-09	3.38E-09	3.53E-09	3.69E-09	3.85E-09
bi208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi209	4.92E-02	4.94E-02	5.60E-02	6.34E-02	7.13E-02	7.97E-02	8.87E-02
bi210m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210	8.09E-07	8.10E-07	8.51E-07	8.92E-07	9.34E-07	9.76E-07	1.02E-06
bi211	2.12E-11	2.13E-11	2.16E-11	2.19E-11	2.23E-11	2.26E-11	2.30E-11
bi212	7.73E-11	5.91E-11	4.49E-14	4.13E-14	4.15E-14	4.18E-14	4.20E-14
bi213	8.42E-10	8.44E-10	9.07E-10	9.73E-10	1.04E-09	1.11E-09	1.18E-09
bi214	2.27E-09	2.28E-09	2.39E-09	2.51E-09	2.62E-09	2.74E-09	2.86E-09
po210	2.24E-05	2.24E-05	2.35E-05	2.46E-05	2.58E-05	2.69E-05	2.81E-05
po211m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
po211	2.35E-16	2.35E-16	2.39E-16	2.42E-16	2.46E-16	2.50E-16	2.54E-16
po212	4.06E-21	3.11E-21	2.36E-24	2.17E-24	2.18E-24	2.20E-24	2.21E-24
po213	1.27E-18	1.27E-18	1.36E-18	1.46E-18	1.56E-18	1.67E-18	1.77E-18
po214	3.13E-16	3.13E-16	3.29E-16	3.45E-16	3.61E-16	3.77E-16	3.93E-16
po215	3.00E-16	3.00E-16	3.05E-16	3.10E-16	3.15E-16	3.20E-16	3.24E-16
po216	3.14E-15	2.40E-15	1.83E-18	1.68E-18	1.69E-18	1.70E-18	1.71E-18
po218	3.61E-10	3.62E-10	3.79E-10	3.98E-10	4.17E-10	4.35E-10	4.54E-10
at217	1.01E-14	1.02E-14	1.09E-14	1.17E-14	1.25E-14	1.33E-14	1.42E-14
rn218	6.15E-26	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rn219	6.80E-13	6.80E-13	6.91E-13	7.02E-13	7.13E-13	7.24E-13	7.35E-13
rn220	1.23E-12	9.39E-13	7.13E-16	6.55E-16	6.59E-16	6.63E-16	6.68E-16
rn222	6.53E-07	6.54E-07	6.86E-07	7.20E-07	7.54E-07	7.87E-07	8.21E-07
fr221	9.39E-11	9.41E-11	1.01E-10	1.09E-10	1.16E-10	1.24E-10	1.31E-10
fr223	3.16E-12	3.16E-12	3.21E-12	3.26E-12	3.31E-12	3.36E-12	3.41E-12
ra222	6.80E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ra223	1.73E-07	1.73E-07	1.76E-07	1.78E-07	1.81E-07	1.84E-07	1.87E-07
ra224	7.11E-09	5.44E-09	4.13E-12	3.80E-12	3.82E-12	3.84E-12	3.87E-12
ra225	4.16E-07	4.17E-07	4.48E-07	4.81E-07	5.14E-07	5.48E-07	5.82E-07
ra226	1.02E-01	1.02E-01	1.07E-01	1.12E-01	1.17E-01	1.22E-01	1.28E-01
ra228	4.21E-10	4.22E-10	4.45E-10	4.69E-10	4.93E-10	5.17E-10	5.41E-10
ac225	2.81E-07	2.82E-07	3.03E-07	3.25E-07	3.47E-07	3.70E-07	3.93E-07
ac227	1.22E-04	1.22E-04	1.24E-04	1.26E-04	1.28E-04	1.30E-04	1.32E-04
ac228	5.14E-14	5.15E-14	5.43E-14	5.72E-14	6.01E-14	6.31E-14	6.60E-14
th226	3.38E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th227	2.84E-07	2.84E-07	2.88E-07	2.93E-07	2.98E-07	3.02E-07	3.07E-07
th228	1.38E-06	1.06E-06	8.02E-10	7.38E-10	7.42E-10	7.47E-10	7.51E-10
th229	8.23E-02	8.25E-02	8.87E-02	9.51E-02	1.02E-01	1.08E-01	1.15E-01
th230	5.44E+00	5.44E+00	5.69E+00	5.95E+00	6.20E+00	6.45E+00	6.70E+00
th231	1.09E-07	2.97E-08	2.98E-08	3.00E-08	3.02E-08	3.03E-08	3.05E-08

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decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.8976E+02mwd, flux= 2.90E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
th232	1.05E+00	1.05E+00	1.11E+00	1.17E+00	1.23E+00	1.29E+00	1.35E+00
th233	1.47E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th234	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06
pa231	1.87E-01	1.87E-01	1.90E-01	1.93E-01	1.96E-01	1.99E-01	2.02E-01
pa232	2.51E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pa233	1.86E-05	1.85E-05	1.85E-05	1.85E-05	1.85E-05	1.85E-05	1.85E-05
pa234m	2.16E-10	2.16E-10	2.16E-10	2.16E-10	2.16E-10	2.16E-10	2.16E-10
pa234	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11
pa235	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u230	3.33E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u231	1.20E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u232	5.13E-05	3.82E-05	2.42E-08	2.16E-08	2.15E-08	2.13E-08	2.12E-08
u233	3.16E+00	3.17E+00	3.32E+00	3.48E+00	3.64E+00	3.80E+00	3.96E+00
u234	1.12E+02	1.12E+02	1.12E+02	1.11E+02	1.11E+02	1.11E+02	1.11E+02
u235	7.29E+03	7.29E+03	7.34E+03	7.38E+03	7.42E+03	7.46E+03	7.50E+03
u236	2.02E+03	2.02E+03	2.03E+03	2.04E+03	2.05E+03	2.06E+03	2.06E+03
u237	3.68E-05	1.81E-10	3.85E-13	3.55E-13	3.27E-13	3.02E-13	2.78E-13
u238	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05
u239	2.00E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u240	1.20E-18	1.20E-18	1.27E-18	1.33E-18	1.40E-18	1.47E-18	1.54E-18
u241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np235	3.92E-10	1.85E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236m	1.80E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236	4.11E-04	4.11E-04	4.09E-04	4.07E-04	4.04E-04	4.02E-04	3.99E-04
np237	5.46E+02	5.46E+02	5.46E+02	5.46E+02	5.46E+02	5.46E+02	5.46E+02
np238	1.15E-05	3.57E-11	3.03E-13	2.22E-15	1.63E-17	1.19E-19	8.74E-22
np239	2.91E-04	1.89E-06	1.73E-06	1.57E-06	1.43E-06	1.30E-06	1.19E-06
np240m	1.02E-20	1.02E-20	1.08E-20	1.14E-20	1.20E-20	1.25E-20	1.31E-20
np240	8.33E-14	1.05E-22	1.11E-22	1.17E-22	1.23E-22	1.29E-22	1.35E-22
np241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu236	9.87E-08	9.99E-10	9.18E-10	9.12E-10	9.07E-10	9.02E-10	8.96E-10
pu237	4.84E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu238	1.74E-01	1.37E-01	6.52E-05	3.03E-08	5.65E-11	3.53E-13	2.56E-15
pu239	1.54E+03	1.54E+03	1.50E+03	1.46E+03	1.41E+03	1.37E+03	1.34E+03
pu240	1.03E+02	1.02E+02	9.24E+01	8.31E+01	7.48E+01	6.73E+01	6.05E+01
pu241	2.54E-02	5.97E-03	1.27E-05	1.17E-05	1.08E-05	9.97E-06	9.18E-06
pu242	6.74E+01	6.74E+01	6.73E+01	6.72E+01	6.70E+01	6.69E+01	6.68E+01
pu243	1.43E-07	1.11E-15	1.11E-15	1.11E-15	1.11E-15	1.11E-15	1.11E-15
pu244	6.06E-08	6.07E-08	6.41E-08	6.76E-08	7.10E-08	7.44E-08	7.79E-08
pu245	8.21E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu246	5.63E-22	5.63E-22	5.41E-22	5.20E-22	5.00E-22	4.80E-22	4.62E-22
am239	2.00E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am240	8.61E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am241	7.77E-01	7.59E-01	1.62E-01	3.29E-02	6.89E-03	1.63E-03	5.54E-04
am242m	2.27E-04	1.96E-04	1.67E-06	1.22E-08	8.94E-11	6.56E-13	4.80E-15
am242	1.81E-08	2.53E-09	2.15E-11	1.57E-13	1.15E-15	8.46E-18	6.20E-20
am243	2.21E+00	2.20E+00	2.01E+00	1.83E+00	1.66E+00	1.51E+00	1.38E+00
am244m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am244	1.25E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am245	1.66E-19	2.63E-31	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am246	1.41E-24	1.41E-24	1.35E-24	1.30E-24	1.25E-24	1.20E-24	1.15E-24
cm241	1.57E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package actinides page 144
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.8976E+02mwd, flux= 2.90E+08n/cm**2-sec
0 nuclide concentrations, grams

basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
cm242	3.65E-06	5.11E-07	4.34E-09	3.18E-11	2.33E-13	1.71E-15	1.25E-17
cm243	9.17E-11	4.42E-11	2.51E-21	6.86E-32	2.04E-42	.00E+00	.00E+00
cm244	1.97E-04	6.24E-05	4.59E-21	1.07E-37	.00E+00	.00E+00	.00E+00
cm245	8.30E-03	8.28E-03	7.65E-03	7.05E-03	6.50E-03	5.99E-03	5.52E-03
cm246	2.43E-04	2.41E-04	2.09E-04	1.81E-04	1.56E-04	1.35E-04	1.17E-04
cm247	3.20E-05	3.20E-05	3.20E-05	3.20E-05	3.20E-05	3.20E-05	3.20E-05
cm248	1.88E-06	1.88E-06	1.88E-06	1.88E-06	1.87E-06	1.87E-06	1.87E-06
cm249	1.95E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm250	1.34E-15	1.34E-15	1.29E-15	1.24E-15	1.19E-15	1.14E-15	1.10E-15
cm251	6.06E-28	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk249	1.40E-12	6.90E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk250	8.37E-21	3.96E-24	3.81E-24	3.66E-24	3.52E-24	3.38E-24	3.25E-24
bk251	2.06E-27	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf249	5.46E-10	5.16E-10	7.57E-11	1.05E-11	1.45E-12	2.01E-13	2.78E-14
cf250	2.31E-14	4.72E-15	1.36E-19	1.30E-19	1.25E-19	1.21E-19	1.16E-19
cf251	1.37E-15	1.34E-15	6.33E-16	2.92E-16	1.35E-16	6.24E-17	2.88E-17
cf252	1.01E-19	3.89E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf253	1.74E-27	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf254	2.68E-35	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es253	2.00E-27	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254	3.67E-33	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
s250	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05

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Part E 5000 year criticality at 2.182 kw/package fission products page 148

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.8976E+02mwd, flux= 2.90E+08n/cm**2-sec

0 .nuclide concentrations, grams

basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
h 3	1.09E-06	2.01E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
li 6	7.54E-05	7.54E-05	7.54E-05	7.54E-05	7.54E-05	7.54E-05	7.54E-05
li 7	2.93E-06	2.93E-06	2.93E-06	2.93E-06	2.93E-06	2.93E-06	2.93E-06
be 9	5.65E-06	5.65E-06	5.65E-06	5.65E-06	5.65E-06	5.65E-06	5.65E-06
be 10	3.74E-05	3.74E-05	3.74E-05	3.73E-05	3.73E-05	3.73E-05	3.73E-05
c 14	7.78E-07	7.75E-07	6.89E-07	6.11E-07	5.41E-07	4.79E-07	4.25E-07
ni 66	6.84E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 66	1.07E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 66	1.79E-07	1.79E-07	1.79E-07	1.79E-07	1.79E-07	1.79E-07	1.79E-07
cu 67	1.02E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 67	2.37E-08	2.37E-08	2.37E-08	2.37E-08	2.37E-08	2.37E-08	2.37E-08
zn 68	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09
zn 69	5.33E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 69m	6.33E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 69	7.81E-08	7.81E-08	7.81E-08	7.81E-08	7.81E-08	7.81E-08	7.81E-08
zn 70	2.08E-06	2.08E-06	2.08E-06	2.08E-06	2.08E-06	2.08E-06	2.08E-06
ga 70	7.49E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 70	2.85E-09	2.85E-09	2.85E-09	2.85E-09	2.85E-09	2.85E-09	2.85E-09
zn 71	1.14E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 71m	4.73E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 71	2.05E-05	2.05E-05	2.05E-05	2.05E-05	2.05E-05	2.05E-05	2.05E-05
ge 71	8.52E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 71m	8.80E-26	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 72	1.58E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 72	2.79E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 72	1.29E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

zn 72	4.25E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 72	1.29E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 72	1.33E-03	1.33E-03	1.33E-03	1.33E-03	1.33E-03	1.33E-03	1.33E-03
co 73	1.02E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 73	4.18E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 73	2.40E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 73	1.87E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 73	1.41E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 73	4.18E-03	4.18E-03	4.18E-03	4.18E-03	4.18E-03	4.18E-03	4.18E-03
ge 73m	3.98E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
co 74	1.53E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 74	5.46E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 74	4.14E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 74	2.02E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 74	3.15E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 74	3.56E-03	3.56E-03	3.56E-03	3.56E-03	3.56E-03	3.56E-03	3.56E-03
co 75	2.80E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 75	6.51E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 75	8.12E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 75	5.38E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 75	7.99E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75	3.17E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 75m	1.62E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 75	3.40E-02	3.40E-02	3.40E-02	3.40E-02	3.40E-02	3.40E-02	3.40E-02
ni 76	3.46E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 76	1.95E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 149

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.8976E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide concentrations, grams

basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
zn 76	7.02E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 76	5.96E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 76	1.04E-01	1.04E-01	1.04E-01	1.04E-01	1.04E-01	1.04E-01	1.04E-01
as 76	2.46E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 76	6.57E-04	6.57E-04	6.57E-04	6.57E-04	6.57E-04	6.57E-04	6.57E-04
ni 77	2.65E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 77	1.34E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 77	3.21E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 77	4.99E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 77	5.82E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 77m	2.05E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 77	6.28E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 77	2.38E-01	2.38E-01	2.38E-01	2.38E-01	2.38E-01	2.38E-01	2.38E-01
se 77m	2.58E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ni 78	6.79E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 78	1.96E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 78	2.81E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 78	4.16E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 78	7.09E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 78	7.40E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 78	7.40E-01	7.40E-01	7.40E-01	7.40E-01	7.40E-01	7.40E-01	7.40E-01
cu 79	5.74E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 79	9.85E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 79	2.78E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 79	4.67E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 79	1.43E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 79	9.48E-01	9.48E-01	9.29E-01	9.09E-01	8.90E-01	8.72E-01	8.54E-01
se 79m	6.15E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

br 79	4.82E-01	4.82E-01	5.01E-01	5.21E-01	5.40E-01	5.58E-01	5.76E-01
br 79m	3.45E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 79	2.23E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cu 80	4.30E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 80	1.88E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 80	1.14E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 80	1.89E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 80	1.11E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 80	4.01E+00	4.01E+00	4.01E+00	4.01E+00	4.01E+00	4.01E+00	4.01E+00
br 80	8.70E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 80m	3.24E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 80	7.43E-04	7.43E-04	7.43E-04	7.43E-04	7.43E-04	7.43E-04	7.43E-04
cu 81	3.60E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 81	9.70E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 81	5.55E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 81	5.25E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 81	3.53E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81	1.23E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 81m	2.65E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 81	5.97E+00	5.97E+00	5.97E+00	5.97E+00	5.97E+00	5.97E+00	5.97E+00
kr 81	1.08E-06	1.08E-06	1.08E-06	1.07E-06	1.07E-06	1.07E-06	1.06E-06
kr 81m	4.97E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zn 82	2.44E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 82	1.98E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 150
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.8976E+02mwd, flux= 2.90E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
ge 82	3.19E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 82	2.13E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 82m	5.75E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 82	9.73E+00	9.73E+00	9.73E+00	9.73E+00	9.73E+00	9.73E+00	9.73E+00
br 82	5.56E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 82m	1.37E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 82	1.27E-01	1.27E-01	1.27E-01	1.27E-01	1.27E-01	1.27E-01	1.27E-01
zn 83	7.47E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 83	1.04E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 83	5.78E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 83	2.44E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83	1.77E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 83m	1.02E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 83	2.48E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 83	1.37E+01	1.37E+01	1.37E+01	1.37E+01	1.37E+01	1.37E+01	1.37E+01
kr 83m	1.89E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ga 84	3.62E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 84	2.45E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 84	7.43E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 84	1.03E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84	1.05E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 84m	5.05E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 84	3.35E+01	3.35E+01	3.35E+01	3.35E+01	3.35E+01	3.35E+01	3.35E+01
ga 85	4.71E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 85	8.81E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 85	1.66E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85	8.33E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 85m	4.40E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 85	1.09E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 85	4.66E-04	6.70E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

kr 85m	1.02E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 85	3.53E+01	3.53E+01	3.53E+01	3.53E+01	3.53E+01	3.53E+01	3.53E+01
ge 86	1.87E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 86	4.30E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 86	9.94E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86	4.36E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 86m	7.84E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 86	5.67E+01	5.67E+01	5.67E+01	5.67E+01	5.67E+01	5.67E+01	5.67E+01
rb 86	5.00E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 86m	1.51E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 86	6.79E-02	6.79E-02	6.79E-02	6.79E-02	6.79E-02	6.79E-02	6.79E-02
ge 87	1.08E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 87	9.13E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 87	2.19E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 87	5.80E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 87	6.00E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 87	7.39E+01	7.39E+01	7.39E+01	7.39E+01	7.39E+01	7.39E+01	7.39E+01
sr 87	3.40E-04	3.40E-04	3.41E-04	3.42E-04	3.43E-04	3.44E-04	3.46E-04
sr 87m	9.46E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ge 88	1.70E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 88	1.91E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 88	3.12E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 151
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.8976E+02mwd, flux= 2.90E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
br 88	1.72E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 88	1.90E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 88	2.03E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 88	1.06E+02	1.06E+02	1.06E+02	1.06E+02	1.06E+02	1.06E+02	1.06E+02
as 89	2.47E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 89	3.06E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 89	3.16E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 89	4.52E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 89	2.31E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 89	1.11E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89	1.42E+02	1.42E+02	1.42E+02	1.42E+02	1.42E+02	1.42E+02	1.42E+02
y 89m	3.83E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 90	1.74E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 90	6.97E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 90	7.43E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 90	8.38E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90	3.65E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90m	1.85E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 90	2.76E-02	1.32E-02	5.57E-13	1.12E-23	2.27E-34	.00E+00	.00E+00
y 90	7.19E-06	3.43E-06	1.45E-16	2.92E-27	4.20E-38	.00E+00	.00E+00
y 90m	6.65E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90	1.74E+02	1.74E+02	1.74E+02	1.74E+02	1.74E+02	1.74E+02	1.74E+02
zr 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 91	4.29E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 91	8.18E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 91	1.55E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	1.81E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 91	1.13E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91	1.66E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91m	5.70E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 91	1.83E+02	1.83E+02	1.83E+02	1.83E+02	1.83E+02	1.83E+02	1.83E+02
nb 91	2.56E-11	2.48E-11	9.22E-12	3.33E-12	1.20E-12	4.33E-13	1.56E-13

se 92	2.15E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 92	8.29E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 92	1.78E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 92	1.23E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 92	3.36E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 92	4.42E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 92	1.93E+02	1.93E+02	1.93E+02	1.93E+02	1.93E+02	1.93E+02	1.93E+02
nb 92	2.52E-07	2.52E-07	2.52E-07	2.52E-07	2.52E-07	2.52E-07	2.52E-07
se 93	8.84E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 93	7.89E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 93	4.25E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 93	1.25E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 93	1.70E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 93	9.41E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 93	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02
nb 93	1.25E+00	1.26E+00	1.32E+00	1.38E+00	1.44E+00	1.51E+00	1.57E+00
nb 93m	1.48E-03	1.48E-03	1.48E-03	1.48E-03	1.48E-03	1.48E-03	1.48E-03
br 94	3.19E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 94	3.12E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 94	3.06E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 152
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.8976E+02mwd, flux= 2.90E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sr 94	2.84E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 94	4.56E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 94	2.28E+02	2.28E+02	2.28E+02	2.28E+02	2.28E+02	2.28E+02	2.28E+02
nb 94	2.21E-04	2.21E-04	2.14E-04	2.07E-04	2.00E-04	1.93E-04	1.86E-04
nb 94m	6.76E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 95	3.43E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 95	9.46E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 95	2.10E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 95	8.57E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 95	2.65E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 95	2.36E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 95	1.29E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 95m	1.48E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 95	2.29E+02	2.29E+02	2.29E+02	2.29E+02	2.29E+02	2.29E+02	2.29E+02
br 96	6.67E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 96	6.50E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 96	2.78E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 96	2.67E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 96	2.39E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 96	2.36E+02	2.36E+02	2.36E+02	2.36E+02	2.36E+02	2.36E+02	2.36E+02
nb 96	8.75E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 96	6.91E+00	6.91E+00	6.91E+00	6.91E+00	6.91E+00	6.91E+00	6.91E+00
kr 97	2.90E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 97	7.29E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 97	5.48E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 97	1.17E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 97	2.46E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 97	1.76E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 97m	2.30E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 97	2.22E+02	2.22E+02	2.22E+02	2.22E+02	2.22E+02	2.22E+02	2.22E+02
kr 98	1.67E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 98	4.01E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 98	3.40E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 98	1.60E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

zr 98	1.31E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 98	1.23E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 98m	8.70E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 98	2.38E+02	2.38E+02	2.38E+02	2.38E+02	2.38E+02	2.38E+02	2.38E+02
tc 98	1.42E-03	1.42E-03	1.42E-03	1.42E-03	1.42E-03	1.42E-03	1.42E-03
rb 99	6.20E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 99	6.16E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 99	2.37E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 99	8.81E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 99	4.07E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 99m	2.88E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 99	1.10E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc 99	2.20E+02	2.20E+02	2.19E+02	2.19E+02	2.18E+02	2.17E+02	2.17E+02
tc 99m	8.80E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru 99	1.47E+01	1.47E+01	1.54E+01	1.61E+01	1.68E+01	1.76E+01	1.83E+01
rb100	3.15E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr100	5.02E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y100	3.47E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 153
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.8976E+02mwd, flux= 2.90E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
zr100	3.02E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb100	6.83E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb100m	8.94E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo100	2.69E+02	2.69E+02	2.69E+02	2.69E+02	2.69E+02	2.69E+02	2.69E+02
tc100	1.15E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru100	1.97E+01	1.97E+01	1.97E+01	1.97E+01	1.97E+01	1.97E+01	1.97E+01
rb101	2.50E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr101	7.85E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y101	1.37E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr101	4.80E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb101	2.82E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo101	3.65E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc101	3.55E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru101	2.23E+02	2.23E+02	2.23E+02	2.23E+02	2.23E+02	2.23E+02	2.23E+02
sr102	2.17E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y102	1.31E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr102	5.05E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb102	4.29E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo102	2.58E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102	2.01E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102m	9.02E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru102	2.14E+02	2.14E+02	2.14E+02	2.14E+02	2.14E+02	2.14E+02	2.14E+02
rh102	1.15E-08	8.82E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr103	6.32E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y103	1.17E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr103	7.83E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb103	3.44E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo103	2.31E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc103	1.90E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru103	1.19E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103	1.45E+02	1.45E+02	1.45E+02	1.45E+02	1.45E+02	1.45E+02	1.45E+02
rh103m	1.18E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr104	2.72E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y104	1.13E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr104	4.22E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

nb104	4.56E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo104	1.49E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc104	2.87E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru104	1.42E+02	1.42E+02	1.42E+02	1.42E+02	1.42E+02	1.42E+02	1.42E+02
rh104	8.28E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104m	3.72E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd104	4.31E+01	4.31E+01	4.31E+01	4.31E+01	4.31E+01	4.31E+01	4.31E+01
y105	1.66E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr105	3.05E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb105	1.09E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo105	6.08E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc105	9.15E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru105	3.25E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105	2.59E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105m	2.60E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd105	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02

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Part E 5000 year criticality at 2.182 kw/package fission products page 154

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.8976E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide concentrations, grams

basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
y106	1.82E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr106	1.79E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb106	5.44E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo106	6.96E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc106	4.54E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru106	4.48E-04	5.96E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106	4.16E-10	5.53E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106m	4.80E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd106	8.11E+01	8.11E+01	8.11E+01	8.11E+01	8.11E+01	8.11E+01	8.11E+01
ag106	2.95E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y107	1.72E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr107	4.75E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb107	6.78E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo107	1.04E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc107	1.66E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru107	2.18E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh107	1.26E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd107	5.21E+01	5.21E+01	5.21E+01	5.21E+01	5.21E+01	5.21E+01	5.21E+01
pd107m	1.66E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag107	1.09E-01	1.09E-01	1.15E-01	1.20E-01	1.26E-01	1.31E-01	1.37E-01
zr108	3.08E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb108	6.29E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo108	5.17E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc108	1.20E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru108	1.59E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108	9.97E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108m	4.10E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd108	3.32E+01	3.32E+01	3.32E+01	3.32E+01	3.32E+01	3.32E+01	3.32E+01
ag108	3.20E-13	2.31E-16	1.16E-18	4.95E-21	2.11E-23	9.00E-26	3.83E-28
ag108m	8.83E-08	7.50E-08	3.76E-10	1.60E-12	6.84E-15	2.91E-17	1.24E-19
cd108	2.54E-04	2.54E-04	2.54E-04	2.54E-04	2.54E-04	2.54E-04	2.54E-04
zr109	8.64E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb109	3.62E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo109	5.18E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc109	1.11E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru109	1.46E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109	3.96E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109m	1.24E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

pd109	2.86E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109m	9.17E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag109	2.22E+01	2.22E+01	2.22E+01	2.22E+01	2.22E+01	2.22E+01	2.22E+01
ag109m	2.30E-10	6.66E-25	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd109	9.09E-12	6.72E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb110	6.88E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo110	1.16E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc110	8.74E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru110	1.81E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110	7.79E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110m	4.13E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd110	9.84E+00	9.84E+00	9.84E+00	9.84E+00	9.84E+00	9.84E+00	9.84E+00
ag110	7.25E-11	2.42E-27	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag110m	2.51E-06	1.56E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 155
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.8976E+02mwd, flux= 2.90E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
cd110	6.08E+00	6.08E+00	6.08E+00	6.08E+00	6.08E+00	6.08E+00	6.08E+00
nb111	8.39E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo111	2.14E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc111	4.31E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru111	6.24E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh111	9.34E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111	1.29E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111m	9.58E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111	5.95E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111m	5.96E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111	5.15E+00	5.15E+00	5.15E+00	5.15E+00	5.15E+00	5.15E+00	5.15E+00
cd111m	3.98E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb112	1.60E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo112	7.45E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc112	1.93E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru112	5.26E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh112	5.54E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd112	3.54E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag112	5.29E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd112	2.70E+00	2.70E+00	2.70E+00	2.70E+00	2.70E+00	2.70E+00	2.70E+00
mo113	3.66E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc113	8.16E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru113	1.54E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh113	1.70E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd113	2.67E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113	5.41E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113m	3.87E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd113	3.18E-02	3.18E-02	3.18E-02	3.18E-02	3.18E-02	3.18E-02	3.18E-02
cd113m	2.95E-06	6.74E-07	1.32E-27	.00E+00	.00E+00	.00E+00	.00E+00
in113	3.06E-02	3.06E-02	3.06E-02	3.06E-02	3.06E-02	3.06E-02	3.06E-02
in113m	1.86E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo114	3.13E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc114	4.39E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru114	1.77E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh114	1.82E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd114	3.68E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag114	1.20E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd114	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00
in114	5.41E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114m	2.43E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

sn114	1.55E-04	1.55E-04	1.55E-04	1.55E-04	1.55E-04	1.55E-04	1.55E-04
mo115	4.73E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc115	2.20E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru115	4.82E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh115	3.95E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd115	6.15E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115	1.53E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115m	9.60E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115	3.48E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115m	3.26E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in115	4.60E-01	4.60E-01	4.60E-01	4.60E-01	4.60E-01	4.60E-01	4.60E-01
in115m	2.92E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 156
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.8976E+02mwd, flux= 2.90E+08n/cm**2-sec
0
nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sn115	4.66E-02	4.66E-02	4.66E-02	4.66E-02	4.66E-02	4.66E-02	4.66E-02
tc116	4.07E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru116	3.34E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh116	2.54E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd116	2.51E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116	3.60E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116m	2.71E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd116	1.34E+00	1.34E+00	1.34E+00	1.34E+00	1.34E+00	1.34E+00	1.34E+00
in116	5.16E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116m	4.47E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn116	4.96E-01	4.96E-01	4.96E-01	4.96E-01	4.96E-01	4.96E-01	4.96E-01
tc117	6.67E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru117	1.06E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh117	1.26E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd117	6.49E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117	8.01E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117m	5.88E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117	1.73E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117m	5.25E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117	3.76E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117m	1.23E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117	1.21E+00	1.21E+00	1.21E+00	1.21E+00	1.21E+00	1.21E+00	1.21E+00
sn117m	1.35E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc118	1.08E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru118	3.38E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh118	7.91E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd118	1.96E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118	4.07E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118m	1.54E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd118	5.65E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118	9.37E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118m	5.80E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn118	9.94E-01	9.94E-01	9.94E-01	9.94E-01	9.94E-01	9.94E-01	9.94E-01
ru119	1.33E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh119	4.59E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd119	6.78E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag119	2.82E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119	2.20E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119m	8.12E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119	1.15E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119m	1.33E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn119	1.06E+00	1.06E+00	1.06E+00	1.06E+00	1.06E+00	1.06E+00	1.06E+00

sn119m	3.95E-08	2.19E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru120	3.00E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh120	3.70E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd120	7.83E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag120	1.02E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd120	9.59E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120	5.91E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120m	1.42E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn120	1.03E+00	1.03E+00	1.03E+00	1.03E+00	1.03E+00	1.03E+00	1.03E+00
rh121	1.51E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 157

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.8976E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide concentrations, grams

basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
pd121	5.55E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag121	5.14E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd121	2.61E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121	3.97E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121m	4.58E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn121	2.06E-08	1.15E-10	5.64E-16	1.90E-21	6.40E-27	2.16E-32	7.15E-38
sn121m	3.85E-06	2.64E-06	1.30E-11	4.36E-17	1.47E-22	4.95E-28	1.67E-33
sb121	1.07E+00	1.07E+00	1.07E+00	1.07E+00	1.07E+00	1.07E+00	1.07E+00
rh122	7.25E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd122	4.08E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag122	1.61E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd122	1.10E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122	3.47E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122m	2.27E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn122	1.34E+00	1.34E+00	1.34E+00	1.34E+00	1.34E+00	1.34E+00	1.34E+00
sb122	4.95E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb122m	5.36E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te122	4.90E-02	4.90E-02	4.90E-02	4.90E-02	4.90E-02	4.90E-02	4.90E-02
rh123	7.81E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd123	1.53E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag123	5.29E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd123	1.21E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123	1.01E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123m	2.21E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123	2.20E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123m	5.43E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb123	1.26E+00	1.26E+00	1.26E+00	1.26E+00	1.26E+00	1.26E+00	1.26E+00
te123	3.85E-04	3.85E-04	3.85E-04	3.85E-04	3.85E-04	3.85E-04	3.85E-04
te123m	1.42E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd124	1.45E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag124	2.72E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd124	1.97E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in124	1.25E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn124	2.25E+00	2.25E+00	2.25E+00	2.25E+00	2.25E+00	2.25E+00	2.25E+00
sb124	8.89E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb124m	3.27E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te124	4.16E-02	4.16E-02	4.16E-02	4.16E-02	4.16E-02	4.16E-02	4.16E-02
pd125	1.16E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag125	1.77E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd125	2.22E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125	5.27E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125m	2.06E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125	1.08E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125m	2.28E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

sb125	4.57E-05	2.25E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te125	2.74E+00	2.74E+00	2.74E+00	2.74E+00	2.74E+00	2.74E+00	2.74E+00
te125m	6.11E-07	3.20E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd126	3.91E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag126	3.02E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd126	8.12E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in126	7.36E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn126	4.36E+00	4.36E+00	4.33E+00	4.30E+00	4.27E+00	4.24E+00	4.21E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 158
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.8976E+02mwd, flux= 2.90E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sb126	2.14E-07	2.07E-07	2.06E-07	2.04E-07	2.03E-07	2.02E-07	2.00E-07
sb126m	1.58E-09	1.58E-09	1.56E-09	1.55E-09	1.54E-09	1.53E-09	1.52E-09
te126	7.15E-01	7.16E-01	7.45E-01	7.75E-01	8.05E-01	8.34E-01	8.64E-01
xe126	1.29E-09	1.29E-09	1.29E-09	1.29E-09	1.29E-09	1.29E-09	1.29E-09
ag127	2.09E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd127	6.96E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127	5.37E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127m	1.75E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127	6.79E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127m	3.03E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb127	7.47E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127	7.54E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127m	3.71E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i127	1.14E+01	1.14E+01	1.14E+01	1.14E+01	1.14E+01	1.14E+01	1.14E+01
xe127	2.44E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag128	5.78E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd128	1.34E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in128	8.87E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn128	1.49E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128	1.33E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128m	2.75E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te128	2.49E+01	2.49E+01	2.49E+01	2.49E+01	2.49E+01	2.49E+01	2.49E+01
i128	2.99E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe128	4.16E-01	4.16E-01	4.16E-01	4.16E-01	4.16E-01	4.16E-01	4.16E-01
cd129	1.90E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in129	6.74E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129	4.76E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129m	1.57E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb129	1.52E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129	3.80E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129m	5.31E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i129	5.09E+01	5.09E+01	5.09E+01	5.09E+01	5.09E+01	5.09E+01	5.09E+01
xe129	4.54E-02	4.55E-02	4.76E-02	4.99E-02	5.21E-02	5.44E-02	5.66E-02
xe129m	3.45E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd130	1.16E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in130	2.92E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn130	2.47E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130	7.57E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130m	5.53E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te130	1.03E+02	1.03E+02	1.03E+02	1.03E+02	1.03E+02	1.03E+02	1.03E+02
i130	2.17E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130m	1.40E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe130	1.22E+00	1.22E+00	1.22E+00	1.22E+00	1.22E+00	1.22E+00	1.22E+00
cd131	3.95E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in131	1.03E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn131	3.64E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

sb131	3.57E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131	4.09E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131m	6.20E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i131	2.21E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02
xe131m	3.59E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 159

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.8976E+02mwd, flux= 2.90E+08n/cm**2-sec

0 nuclide concentrations, grams

basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
cd132	6.24E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in132	1.94E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn132	3.01E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132	3.72E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132m	2.58E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te132	1.31E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i132	3.87E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe132	2.91E+02	2.91E+02	2.91E+02	2.91E+02	2.91E+02	2.91E+02	2.91E+02
cs132	6.08E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba132	5.12E-05	5.12E-05	5.12E-05	5.12E-05	5.12E-05	5.12E-05	5.12E-05
in133	3.51E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn133	3.08E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb133	3.38E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133	2.83E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133m	1.03E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133	5.12E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133m	4.38E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133	3.11E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133m	3.99E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs133	3.47E+02	3.47E+02	3.47E+02	3.47E+02	3.47E+02	3.47E+02	3.47E+02
ba133	1.93E-12	2.68E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in134	4.25E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn134	3.68E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134	3.63E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134m	3.02E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te134	1.60E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134	2.44E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134m	1.27E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134	4.36E+02	4.36E+02	4.36E+02	4.36E+02	4.36E+02	4.36E+02	4.36E+02
xe134m	3.47E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134	8.52E-04	3.55E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134m	1.04E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba134	3.11E+01	3.11E+01	3.11E+01	3.11E+01	3.11E+01	3.11E+01	3.11E+01
sn135	1.28E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb135	3.16E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te135	6.29E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i135	1.55E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135	2.32E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135m	1.25E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs135	1.84E+02	1.84E+02	1.84E+02	1.84E+02	1.84E+02	1.83E+02	1.83E+02
cs135m	7.05E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135	1.12E+00	1.12E+00	1.17E+00	1.23E+00	1.28E+00	1.34E+00	1.39E+00
ba135m	1.66E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn136	1.96E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb136	2.37E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te136	2.72E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136	2.62E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136m	6.98E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

xe136	5.69E+02	5.69E+02	5.69E+02	5.69E+02	5.69E+02	5.69E+02	5.69E+02
cs136	2.01E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba136	4.97E+00	4.97E+00	4.97E+00	4.97E+00	4.97E+00	4.97E+00	4.97E+00
ba136m	6.10E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 160
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.8976E+02mwd, flux= 2.90E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sb137	1.81E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te137	1.83E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i137	8.08E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe137	1.46E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs137	6.32E-02	3.16E-02	5.82E-12	5.37E-22	4.94E-32	4.61E-42	.00E+00
ba137	3.67E+02	3.67E+02	3.67E+02	3.67E+02	3.67E+02	3.67E+02	3.67E+02
ba137m	9.65E-09	4.82E-09	8.89E-19	8.19E-29	7.55E-39	.00E+00	.00E+00
sb138	6.96E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te138	1.72E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i138	1.08E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe138	5.24E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138	1.28E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138m	4.26E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba138	3.72E+02	3.72E+02	3.72E+02	3.72E+02	3.72E+02	3.72E+02	3.72E+02
la138	2.23E-03	2.23E-03	2.23E-03	2.23E-03	2.23E-03	2.23E-03	2.23E-03
sb139	6.78E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te139	1.15E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i139	2.08E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe139	1.91E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs139	3.51E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba139	3.28E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la139	3.54E+02	3.54E+02	3.54E+02	3.54E+02	3.54E+02	3.54E+02	3.54E+02
ce139	4.65E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr139	3.32E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te140	2.70E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i140	1.84E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe140	4.68E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs140	3.65E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba140	7.10E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la140	9.51E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce140	3.74E+02	3.74E+02	3.74E+02	3.74E+02	3.74E+02	3.74E+02	3.74E+02
pr140	1.49E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te141	9.56E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i141	1.30E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe141	2.28E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs141	1.11E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba141	6.54E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la141	8.48E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce141	1.69E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr141	3.28E+02	3.28E+02	3.28E+02	3.28E+02	3.28E+02	3.28E+02	3.28E+02
nd141	8.48E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te142	7.59E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i142	1.34E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe142	6.31E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs142	4.45E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba142	3.67E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la142	3.25E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce142	3.30E+02	3.30E+02	3.30E+02	3.30E+02	3.30E+02	3.30E+02	3.30E+02
pr142	1.06E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr142m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

nd142	3.40E+00	3.40E+00	3.40E+00	3.40E+00	3.40E+00	3.40E+00	3.40E+00
i143	3.72E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 161
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.8976E+02mwd, flux= 2.90E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
xe143	7.31E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs143	2.47E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba143	7.37E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la143	4.93E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce143	6.95E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr143	6.86E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd143	2.73E+02	2.73E+02	2.73E+02	2.73E+02	2.73E+02	2.73E+02	2.73E+02
i144	5.46E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe144	1.78E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs144	3.99E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba144	4.68E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la144	2.14E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce144	1.32E-03	3.49E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144	5.54E-08	1.47E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144m	3.24E-10	8.56E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd144	3.50E+02	3.50E+02	3.50E+02	3.50E+02	3.50E+02	3.50E+02	3.50E+02
i145	2.30E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe145	1.42E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs145	5.49E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba145	7.78E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la145	8.94E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce145	7.22E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr145	8.61E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd145	2.07E+02	2.07E+02	2.07E+02	2.07E+02	2.07E+02	2.07E+02	2.07E+02
pm145	1.46E-07	4.76E-08	1.51E-24	1.48E-41	.00E+00	.00E+00	.00E+00
sm145	7.55E-09	1.50E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe146	8.27E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs146	7.72E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba146	2.16E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la146	1.50E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce146	2.56E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr146	4.60E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd146	1.91E+02	1.91E+02	1.91E+02	1.91E+02	1.91E+02	1.91E+02	1.91E+02
pm146	9.27E-10	2.16E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm146	2.89E-03	2.89E-03	2.89E-03	2.89E-03	2.89E-03	2.89E-03	2.89E-03
xe147	9.31E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs147	2.50E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba147	1.05E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la147	4.39E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce147	1.33E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr147	2.02E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd147	2.36E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm147	2.06E-03	7.52E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm147	9.16E+01	9.16E+01	9.16E+01	9.16E+01	9.16E+01	9.16E+01	9.16E+01
cs148	1.73E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba148	1.78E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la148	3.26E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce148	9.32E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr148	2.58E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd148	1.05E+02	1.05E+02	1.05E+02	1.05E+02	1.05E+02	1.05E+02	1.05E+02
pm148	1.31E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148m	1.03E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part E 5000 year criticality at 2.182 kw/package fission products page 162
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.8976E+02mwd, flux= 2.90E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sm148	2.98E+01	2.98E+01	2.98E+01	2.98E+01	2.98E+01	2.98E+01	2.98E+01
cs149	1.72E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba149	2.27E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la149	2.10E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce149	4.44E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr149	1.72E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd149	8.38E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm149	2.58E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm149	7.88E-01	7.88E-01	7.88E-01	7.88E-01	7.88E-01	7.88E-01	7.88E-01
eu149	1.72E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs150	1.12E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba150	2.86E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la150	8.55E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce150	1.46E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr150	4.71E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd150	4.94E+01	4.94E+01	4.94E+01	4.94E+01	4.94E+01	4.94E+01	4.94E+01
pm150	3.98E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm150	8.21E+01	8.21E+01	8.21E+01	8.21E+01	8.21E+01	8.21E+01	8.21E+01
eu150	3.00E-08	1.68E-08	1.17E-16	4.58E-25	1.79E-33	6.94E-42	.00E+00
ba151	1.01E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la151	1.73E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce151	1.03E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr151	7.27E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd151	4.78E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm151	6.63E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm151	3.04E-02	2.41E-02	1.37E-05	6.20E-09	2.80E-12	1.26E-15	5.71E-19
eu151	5.87E+00	5.87E+00	5.90E+00	5.90E+00	5.90E+00	5.90E+00	5.90E+00
ba152	2.75E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la152	5.64E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce152	7.31E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr152	7.80E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd152	2.83E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152	1.05E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152m	6.47E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm152	3.77E+01	3.77E+01	3.77E+01	3.77E+01	3.77E+01	3.77E+01	3.77E+01
eu152	3.67E-03	7.70E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu152m	1.59E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd152	6.80E-01	6.80E-01	6.81E-01	6.81E-01	6.81E-01	6.81E-01	6.81E-01
la153	6.53E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce153	7.06E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr153	2.29E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd153	1.57E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm153	9.07E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm153	2.17E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu153	2.77E+01	2.77E+01	2.77E+01	2.77E+01	2.77E+01	2.77E+01	2.77E+01
gd153	5.73E-07	1.26E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la154	7.85E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce154	9.84E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr154	9.44E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd154	4.21E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154	1.37E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154m	4.44E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.8976E+02mwd, flux= 2.90E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
sm154	9.26E+00	9.26E+00	9.26E+00	9.26E+00	9.26E+00	9.26E+00	9.26E+00
eu154	1.79E-03	1.59E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd154	8.60E+00	8.60E+00	8.60E+00	8.60E+00	8.60E+00	8.60E+00	8.60E+00
la155	4.14E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce155	2.29E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr155	2.24E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd155	6.29E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm155	3.84E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm155	1.32E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu155	1.46E-04	1.72E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155	1.51E+00	1.51E+00	1.51E+00	1.51E+00	1.51E+00	1.51E+00	1.51E+00
ce156	2.04E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr156	1.02E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd156	2.16E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm156	4.76E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm156	1.94E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu156	7.62E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd156	1.12E+01	1.12E+01	1.12E+01	1.12E+01	1.12E+01	1.12E+01	1.12E+01
ce157	3.56E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr157	1.65E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd157	6.40E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm157	8.80E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm157	1.60E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu157	1.89E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd157	1.63E-02	1.63E-02	1.63E-02	1.63E-02	1.63E-02	1.63E-02	1.63E-02
pr158	3.95E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd158	1.19E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm158	1.29E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm158	5.28E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu158	5.06E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd158	3.34E+00	3.34E+00	3.34E+00	3.34E+00	3.34E+00	3.34E+00	3.34E+00
pr159	1.83E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd159	2.63E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm159	2.05E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm159	9.46E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu159	9.46E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd159	7.53E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb159	5.13E-01	5.13E-01	5.13E-01	5.13E-01	5.13E-01	5.13E-01	5.13E-01
nd160	2.15E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm160	5.58E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm160	1.21E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu160	1.56E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd160	2.29E-01	2.29E-01	2.29E-01	2.29E-01	2.29E-01	2.29E-01	2.29E-01
tb160	1.63E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy160	4.13E-02	4.13E-02	4.13E-02	4.13E-02	4.13E-02	4.13E-02	4.13E-02
nd161	3.54E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm161	7.43E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm161	1.53E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu161	5.52E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd161	4.32E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb161	1.18E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=1.8976E+02mwd, flux= 2.90E+08n/cm**2-sec
0 nuclide concentrations, grams

basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	20030.0 yr	21000.0 yr	22000.0 yr	23000.0 yr	24000.0 yr	25000.0 yr
dy161	8.35E-02	8.35E-02	8.35E-02	8.35E-02	8.35E-02	8.35E-02	8.35E-02
pm162	2.08E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm162	2.82E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu162	5.70E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd162	4.55E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162	4.29E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162m	1.53E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy162	5.77E-02	5.77E-02	5.77E-02	5.77E-02	5.77E-02	5.77E-02	5.77E-02
sm163	5.30E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu163	5.02E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd163	2.96E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163	4.37E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy163	3.79E-02	3.79E-02	3.79E-02	3.79E-02	3.79E-02	3.79E-02	3.79E-02
sm164	4.37E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu164	1.17E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd164	1.24E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb164	2.48E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy164	1.03E-02	1.03E-02	1.03E-02	1.03E-02	1.03E-02	1.03E-02	1.03E-02
sm165	7.58E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu165	1.14E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd165	8.68E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb165	6.10E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165	5.31E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165m	3.60E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho165	1.01E-02	1.01E-02	1.01E-02	1.01E-02	1.01E-02	1.01E-02	1.01E-02
dy166	2.58E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166	8.97E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166m	4.96E-07	4.88E-07	2.78E-07	1.56E-07	8.77E-08	4.92E-08	2.76E-08
er166	1.67E-03	1.67E-03	1.67E-03	1.67E-03	1.67E-03	1.67E-03	1.67E-03
er167	2.63E-05	2.63E-05	2.63E-05	2.63E-05	2.63E-05	2.63E-05	2.63E-05
er167m	6.62E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er168	2.21E-05	2.21E-05	2.21E-05	2.21E-05	2.21E-05	2.21E-05	2.21E-05
yb168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er169	1.25E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm169	7.59E-07	7.59E-07	7.59E-07	7.59E-07	7.59E-07	7.59E-07	7.59E-07
yb169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er170	8.07E-07	8.07E-07	8.07E-07	8.07E-07	8.07E-07	8.07E-07	8.07E-07
tm170	1.08E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb170	4.73E-09	4.73E-09	4.73E-09	4.73E-09	4.73E-09	4.73E-09	4.73E-09
er171	5.71E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm171	1.30E-11	2.59E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb171	1.08E-06	1.08E-06	1.08E-06	1.08E-06	1.08E-06	1.08E-06	1.08E-06
er172	2.22E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm172	3.02E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb172	6.88E-07	6.88E-07	6.88E-07	6.88E-07	6.88E-07	6.88E-07	6.88E-07
total	9.78E+03	9.78E+03	9.78E+03	9.78E+03	9.78E+03	9.78E+03	9.78E+03

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Part C 10000 year criticality at 2.182 kw/package actinides page 142
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+02mwd, flux= 2.93E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	25030. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
he 4	4.23E+01	4.24E+01	4.32E+01	4.93E+01	5.43E+01	6.08E+01	6.47E+01	6.61E+01	6.73E+01	6.82E+01	6.91E+01
tl206	7.61E-16	7.62E-16	7.92E-16	1.07E-15	1.35E-15	1.89E-15	2.25E-15	2.32E-15	2.45E-15	2.56E-15	2.65E-15

tl207	7.43E-11	7.43E-11	7.45E-11	7.64E-11	7.87E-11	8.34E-11	8.75E-11	8.92E-11	9.07E-11	9.20E-11	9.31E-11
tl208	2.22E-12	1.70E-12	9.85E-16	9.11E-16	9.57E-16	1.05E-15	1.16E-15	1.22E-15	1.27E-15	1.33E-15	1.39E-15
tl209	1.16E-12	1.17E-12	1.23E-12	1.86E-12	2.59E-12	4.00E-12	5.31E-12	5.92E-12	6.50E-12	7.05E-12	7.58E-12
pb206	6.02E-01	6.04E-01	6.54E-01	1.21E+00	2.01E+00	4.15E+00	6.84E+00	8.34E+00	9.91E+00	1.16E+01	1.33E+01
pb207	4.82E-02	4.84E-02	5.39E-02	1.06E-01	1.65E-01	2.90E-01	4.21E-01	4.88E-01	5.57E-01	6.27E-01	6.98E-01
pb208	5.07E-03	5.09E-03	5.15E-03	5.15E-03	5.16E-03	5.16E-03	5.17E-03	5.17E-03	5.18E-03	5.18E-03	5.19E-03
pb209	4.91E-09	4.92E-09	5.20E-09	7.87E-09	1.09E-08	1.69E-08	2.24E-08	2.50E-08	2.74E-08	2.98E-08	3.20E-08
pb210	1.64E-03	1.64E-03	1.71E-03	2.31E-03	2.92E-03	4.08E-03	4.85E-03	5.01E-03	5.28E-03	5.51E-03	5.71E-03
pb211	5.75E-10	5.75E-10	5.76E-10	5.91E-10	6.09E-10	6.45E-10	6.77E-10	6.90E-10	7.01E-10	7.11E-10	7.20E-10
pb212	1.31E-09	1.01E-09	5.84E-13	5.40E-13	5.67E-13	6.25E-13	6.88E-13	7.21E-13	7.56E-13	7.90E-13	8.26E-13
pb214	3.82E-09	3.83E-09	3.98E-09	5.38E-09	6.79E-09	9.51E-09	1.13E-08	1.17E-08	1.23E-08	1.28E-08	1.33E-08
bi208	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi209	8.86E-02	8.89E-02	9.80E-02	2.08E-01	3.83E-01	9.05E-01	1.64E+00	2.08E+00	2.57E+00	3.11E+00	3.69E+00
bi210m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bi210	1.01E-06	1.01E-06	1.05E-06	1.42E-06	1.79E-06	2.51E-06	2.98E-06	3.09E-06	3.25E-06	3.39E-06	3.51E-06
bi211	3.41E-11	3.41E-11	3.42E-11	3.50E-11	3.61E-11	3.82E-11	4.01E-11	4.09E-11	4.16E-11	4.22E-11	4.27E-11
bi212	1.25E-10	9.53E-11	5.54E-14	5.12E-14	5.38E-14	5.93E-14	6.53E-14	6.84E-14	7.17E-14	7.50E-14	7.84E-14
bi213	1.17E-09	1.17E-09	1.24E-09	1.87E-09	2.60E-09	4.03E-09	5.34E-09	5.95E-09	6.53E-09	7.09E-09	7.62E-09
bi214	2.84E-09	2.84E-09	2.95E-09	3.99E-09	5.04E-09	7.06E-09	8.39E-09	8.67E-09	9.14E-09	9.54E-09	9.88E-09
po210	2.79E-05	2.79E-05	2.90E-05	3.92E-05	4.96E-05	6.94E-05	8.24E-05	8.52E-05	8.98E-05	9.37E-05	9.71E-05
po211m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
po211	3.76E-16	3.77E-16	3.77E-16	3.87E-16	3.99E-16	4.23E-16	4.43E-16	4.52E-16	4.60E-16	4.66E-16	4.72E-16
po212	6.55E-21	5.01E-21	2.91E-24	2.69E-24	2.83E-24	3.12E-24	3.43E-24	3.60E-24	3.77E-24	3.94E-24	4.12E-24
po213	1.76E-18	1.76E-18	1.86E-18	2.82E-18	3.92E-18	6.05E-18	8.02E-18	8.94E-18	9.82E-18	1.07E-17	1.15E-17
po214	3.91E-16	3.91E-16	4.06E-16	5.49E-16	6.94E-16	9.71E-16	1.15E-15	1.19E-15	1.26E-15	1.31E-15	1.36E-15
po215	4.81E-16	4.81E-16	4.82E-16	4.95E-16	5.10E-16	5.40E-16	5.67E-16	5.78E-16	5.87E-16	5.96E-16	6.03E-16
po216	5.07E-15	3.88E-15	2.25E-18	2.08E-18	2.19E-18	2.41E-18	2.66E-18	2.78E-18	2.91E-18	3.05E-18	3.19E-18
po218	4.51E-10	4.51E-10	4.69E-10	6.34E-10	8.01E-10	1.12E-09	1.33E-09	1.38E-09	1.45E-09	1.51E-09	1.57E-09
at217	1.41E-14	1.41E-14	1.49E-14	2.25E-14	3.13E-14	4.84E-14	6.42E-14	7.16E-14	7.86E-14	8.53E-14	9.17E-14
rn218	1.02E-25	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rn219	1.09E-12	1.09E-12	1.09E-12	1.12E-12	1.16E-12	1.22E-12	1.28E-12	1.31E-12	1.33E-12	1.35E-12	1.37E-12
rn220	1.98E-12	1.51E-12	8.79E-16	8.14E-16	8.54E-16	9.42E-16	1.04E-15	1.09E-15	1.14E-15	1.19E-15	1.24E-15
rn222	8.15E-07	8.16E-07	8.48E-07	1.15E-06	1.45E-06	2.03E-06	2.41E-06	2.49E-06	2.62E-06	2.74E-06	2.84E-06
fr221	1.30E-10	1.31E-10	1.38E-10	2.09E-10	2.91E-10	4.49E-10	5.95E-10	6.64E-10	7.29E-10	7.91E-10	8.50E-10
fr223	5.06E-12	5.06E-12	5.07E-12	5.20E-12	5.36E-12	5.68E-12	5.96E-12	6.08E-12	6.18E-12	6.27E-12	6.34E-12
ra222	1.12E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ra223	2.77E-07	2.77E-07	2.78E-07	2.85E-07	2.94E-07	3.11E-07	3.26E-07	3.33E-07	3.38E-07	3.43E-07	3.47E-07
ra224	1.15E-08	8.77E-09	5.09E-12	4.71E-12	4.95E-12	5.46E-12	6.01E-12	6.29E-12	6.59E-12	6.90E-12	7.21E-12
ra225	5.78E-07	5.79E-07	6.11E-07	9.26E-07	1.29E-06	1.99E-06	2.64E-06	2.94E-06	3.23E-06	3.50E-06	3.76E-06
ra226	1.27E-01	1.27E-01	1.32E-01	1.78E-01	2.25E-01	3.15E-01	3.75E-01	3.87E-01	4.08E-01	4.26E-01	4.41E-01
ra228	5.41E-10	5.42E-10	5.66E-10	7.89E-10	1.04E-09	1.55E-09	2.05E-09	2.31E-09	2.56E-09	2.81E-09	3.07E-09
ac225	3.90E-07	3.91E-07	4.13E-07	6.25E-07	8.69E-07	1.34E-06	1.78E-06	1.99E-06	2.18E-06	2.37E-06	2.54E-06
ac227	1.96E-04	1.96E-04	1.97E-04	2.02E-04	2.08E-04	2.20E-04	2.31E-04	2.35E-04	2.39E-04	2.43E-04	2.46E-04
ac228	6.60E-14	6.61E-14	6.90E-14	9.63E-14	1.27E-13	1.89E-13	2.51E-13	2.82E-13	3.13E-13	3.44E-13	3.74E-13
th226	5.57E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th227	4.55E-07	4.55E-07	4.56E-07	4.68E-07	4.82E-07	5.11E-07	5.36E-07	5.46E-07	5.56E-07	5.64E-07	5.70E-07
th228	2.23E-06	1.70E-06	9.90E-10	9.16E-10	9.61E-10	1.06E-09	1.17E-09	1.22E-09	1.28E-09	1.34E-09	1.40E-09
th229	1.14E-01	1.15E-01	1.21E-01	1.83E-01	2.55E-01	3.94E-01	5.22E-01	5.82E-01	6.39E-01	6.93E-01	7.45E-01
th230	6.63E+00	6.64E+00	6.90E+00	9.10E+00	1.13E+01	1.49E+01	1.77E+01	1.88E+01	1.98E+01	2.06E+01	2.13E+01
th231	1.29E-07	2.99E-08	3.00E-08	3.13E-08	3.23E-08	3.37E-08	3.45E-08	3.47E-08	3.49E-08	3.51E-08	3.52E-08

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Part C 10000 year criticality at 2.182 kw/package actinides page 143
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+02mwd, flux= 2.93E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	25030. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
th232	1.35E+00	1.35E+00	1.41E+00	1.96E+00	2.59E+00	3.85E+00	5.11E+00	5.74E+00	6.37E+00	7.00E+00	7.63E+00
th233	1.93E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
th234	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06	6.42E-06
pa231	3.00E-01	3.00E-01	3.01E-01	3.09E-01	3.18E-01	3.37E-01	3.53E-01	3.60E-01	3.66E-01	3.72E-01	3.76E-01

pa232	4.12E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pa233	1.87E-05	1.87E-05	1.87E-05	1.87E-05	1.86E-05	1.85E-05	1.84E-05	1.83E-05	1.82E-05	1.82E-05	1.81E-05
pa234m	2.16E-10	2.16E-10	2.16E-10	2.16E-10	2.16E-10	2.16E-10	2.16E-10	2.16E-10	2.16E-10	2.16E-10	2.16E-10
pa234	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11	9.67E-11
pa235	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u230	5.50E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u231	1.51E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u232	8.28E-05	6.15E-05	2.96E-08	2.43E-08	2.28E-08	2.02E-08	1.79E-08	1.69E-08	1.59E-08	1.50E-08	1.41E-08
u233	3.88E+00	3.88E+00	4.03E+00	5.42E+00	6.90E+00	9.66E+00	1.22E+01	1.33E+01	1.44E+01	1.55E+01	1.65E+01
u234	1.16E+02	1.16E+02	1.16E+02	1.14E+02	1.11E+02	1.07E+02	1.02E+02	9.99E+01	9.78E+01	9.58E+01	9.38E+01
u235	7.35E+03	7.35E+03	7.39E+03	7.69E+03	7.95E+03	8.29E+03	8.48E+03	8.54E+03	8.59E+03	8.62E+03	8.65E+03
u236	2.09E+03	2.09E+03	2.10E+03	2.14E+03	2.16E+03	2.17E+03	2.17E+03	2.17E+03	2.17E+03	2.16E+03	2.16E+03
u237	3.87E-05	1.46E-10	2.37E-13	1.14E-13	5.03E-14	9.84E-15	1.92E-15	8.51E-16	3.77E-16	1.67E-16	7.37E-17
u238	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05	4.42E+05
u239	2.04E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
u240	1.57E-18	1.57E-18	1.65E-18	2.35E-18	3.12E-18	4.60E-18	6.03E-18	6.72E-18	7.40E-18	8.06E-18	8.71E-18
u241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np235	4.05E-10	1.91E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236m	1.86E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np236	4.85E-04	4.85E-04	4.82E-04	4.57E-04	4.30E-04	3.81E-04	3.38E-04	3.18E-04	2.99E-04	2.82E-04	2.65E-04
np237	5.50E+02	5.50E+02	5.51E+02	5.49E+02	5.47E+02	5.44E+02	5.40E+02	5.39E+02	5.37E+02	5.35E+02	5.33E+02
np238	1.18E-05	2.92E-11	2.48E-13	1.51E-32	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
np239	2.97E-04	1.76E-06	1.61E-06	6.89E-07	2.69E-07	4.10E-08	6.25E-09	2.44E-09	9.53E-10	3.72E-10	1.45E-10
np240m	1.34E-20	1.34E-20	1.40E-20	2.00E-20	2.66E-20	3.93E-20	5.15E-20	5.74E-20	6.32E-20	6.88E-20	7.44E-20
np240	8.72E-14	1.38E-22	1.44E-22	2.06E-22	2.74E-22	4.04E-22	5.29E-22	5.90E-22	6.50E-22	7.08E-22	7.65E-22
np241	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu236	1.02E-07	1.17E-09	1.08E-09	1.03E-09	9.65E-10	8.55E-10	7.58E-10	7.14E-10	6.72E-10	6.33E-10	5.96E-10
pu237	4.51E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu238	1.80E-01	1.42E-01	6.71E-05	1.12E-25	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu239	1.40E+03	1.40E+03	1.36E+03	1.05E+03	7.89E+02	4.44E+02	2.50E+02	1.87E+02	1.41E+02	1.05E+02	7.91E+01
pu240	8.09E+01	8.07E+01	7.28E+01	2.81E+01	9.79E+00	1.18E+00	1.43E-01	4.98E-02	1.73E-02	6.02E-03	2.09E-03
pu241	2.05E-02	4.82E-03	7.82E-06	3.75E-06	1.66E-06	3.25E-07	6.36E-08	2.81E-08	1.24E-08	5.50E-09	2.43E-09
pu242	6.59E+01	6.59E+01	6.58E+01	6.47E+01	6.35E+01	6.12E+01	5.90E+01	5.79E+01	5.68E+01	5.58E+01	5.48E+01
pu243	1.43E-07	1.09E-15	1.09E-15	1.09E-15	1.09E-15	1.09E-15	1.09E-15	1.09E-15	1.09E-15	1.09E-15	1.09E-15
pu244	7.93E-08	7.94E-08	8.33E-08	1.19E-07	1.58E-07	2.33E-07	3.05E-07	3.40E-07	3.75E-07	4.08E-07	4.41E-07
pu245	1.10E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pu246	4.62E-22	4.61E-22	4.44E-22	3.10E-22	2.08E-22	9.38E-23	4.23E-23	2.84E-23	1.91E-23	1.28E-23	8.59E-24
am239	1.64E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am240	7.06E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am241	6.23E-01	6.09E-01	1.30E-01	1.13E-04	5.01E-05	9.79E-06	1.92E-06	8.48E-07	3.75E-07	1.66E-07	7.34E-08
am242m	1.86E-04	1.61E-04	1.36E-06	8.32E-26	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am242	1.48E-08	2.07E-09	1.76E-11	1.07E-30	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am243	2.05E+00	2.05E+00	1.87E+00	8.01E-01	3.13E-01	4.77E-02	7.27E-03	2.84E-03	1.11E-03	4.33E-04	1.69E-04
am244m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am244	1.19E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am245	2.21E-19	3.11E-31	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
am246	1.15E-24	1.15E-24	1.11E-24	7.74E-25	5.20E-25	2.34E-25	1.06E-25	7.09E-26	4.76E-26	3.20E-26	2.15E-26
cm241	1.35E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package actinides page 144
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+02mwd, flux= 2.93E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	25030. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
cm242	3.00E-06	4.18E-07	3.55E-09	2.17E-28	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm243	7.71E-11	3.72E-11	2.11E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm244	1.87E-04	5.94E-05	4.36E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm245	5.10E-03	5.09E-03	4.70E-03	2.26E-03	9.98E-04	1.95E-04	3.82E-05	1.69E-05	7.48E-06	3.31E-06	1.46E-06
cm246	1.69E-04	1.68E-04	1.46E-04	3.89E-05	9.00E-06	4.80E-07	2.56E-08	5.92E-09	1.37E-09	3.16E-10	7.30E-11
cm247	3.14E-05	3.14E-05	3.14E-05	3.14E-05	3.14E-05	3.14E-05	3.14E-05	3.13E-05	3.13E-05	3.13E-05	3.13E-05

cm248	2.18E-06	2.18E-06	2.17E-06	2.13E-06	2.09E-06	2.01E-06	1.93E-06	1.89E-06	1.85E-06	1.81E-06	1.77E-06
cm249	2.31E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cm250	1.10E-15	1.10E-15	1.06E-15	7.39E-16	4.96E-16	2.24E-16	1.01E-16	6.77E-17	4.54E-17	3.05E-17	2.05E-17
cm251	5.08E-28	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk249	1.66E-12	8.16E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
bk250	1.01E-20	3.24E-24	3.12E-24	2.18E-24	1.46E-24	6.60E-25	2.98E-25	2.00E-25	1.34E-25	9.00E-26	6.05E-26
bk251	1.73E-27	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf249	6.47E-10	6.11E-10	8.97E-11	1.67E-18	4.28E-27	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf250	2.81E-14	5.72E-15	1.11E-19	7.77E-20	5.22E-20	2.35E-20	1.06E-20	7.12E-21	4.78E-21	3.21E-21	2.15E-21
cf251	1.59E-15	1.55E-15	7.32E-16	7.04E-19	3.13E-22	6.17E-29	1.22E-35	5.42E-39	2.46E-42	.00E+00	.00E+00
cf252	1.20E-19	4.61E-23	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf253	2.11E-27	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf254	3.22E-35	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cf255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es253	2.42E-27	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es254	4.56E-33	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
es255	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
s250	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
total	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05	4.54E+05

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Part C 10000 year criticality at 2.182 kw/package fission products page 151

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+02mwd, flux= 2.93E+08n/cm**2-sec

0

nuclide concentrations, grams

basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	25030. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
br 88	1.76E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 88	1.93E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 88	2.06E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 88	1.08E+02	1.08E+02	1.08E+02	1.08E+02	1.08E+02	1.08E+02	1.08E+02	1.08E+02	1.08E+02	1.08E+02	1.08E+02
as 89	2.53E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 89	3.14E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 89	3.22E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 89	4.61E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 89	2.35E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 89	1.13E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 89	1.45E+02	1.45E+02	1.45E+02	1.45E+02	1.45E+02	1.45E+02	1.45E+02	1.45E+02	1.45E+02	1.45E+02	1.45E+02
y 89m	3.89E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
as 90	1.78E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 90	7.16E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 90	7.57E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 90	8.54E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90	3.72E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 90m	1.88E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 90	2.81E-02	1.34E-02	5.67E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 90	7.32E-06	3.49E-06	1.47E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 90m	6.94E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 90	1.77E+02	1.77E+02	1.77E+02	1.77E+02	1.77E+02	1.77E+02	1.77E+02	1.77E+02	1.77E+02	1.77E+02	1.77E+02
zr 90m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
se 91	4.40E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 91	8.40E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 91	1.58E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 91	1.84E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 91	1.15E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91	1.69E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 91m	5.78E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 91	1.87E+02	1.87E+02	1.87E+02	1.87E+02	1.87E+02	1.87E+02	1.87E+02	1.87E+02	1.87E+02	1.87E+02	1.87E+02
nb 91	3.29E-11	3.19E-11	1.19E-11	1.23E-15	4.61E-20	6.44E-29	9.01E-38	3.32E-42	.00E+00	.00E+00	.00E+00
se 92	2.20E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 92	8.51E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

kr 92	1.82E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 92	1.25E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 92	3.40E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 92	4.48E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 92	1.97E+02	1.97E+02	1.97E+02	1.97E+02	1.97E+02	1.97E+02	1.97E+02	1.97E+02	1.97E+02	1.97E+02	1.97E+02
nb 92	5.42E-07	5.42E-07	5.42E-07	5.42E-07	5.42E-07	5.42E-07	5.42E-07	5.41E-07	5.41E-07	5.41E-07	5.41E-07
se 93	9.05E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 93	7.85E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 93	4.36E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 93	1.27E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 93	1.72E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 93	9.50E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 93	1.43E+02	1.43E+02	1.43E+02	1.42E+02	1.41E+02	1.40E+02	1.39E+02	1.38E+02	1.38E+02	1.37E+02	1.36E+02
nb 93	1.57E+00	1.58E+00	1.64E+00	2.22E+00	2.86E+00	4.14E+00	5.40E+00	6.03E+00	6.66E+00	7.28E+00	7.90E+00
nb 93m	1.51E-03	1.51E-03	1.50E-03	1.50E-03	1.49E-03	1.48E-03	1.46E-03	1.46E-03	1.45E-03	1.45E-03	1.44E-03
br 94	3.27E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 94	3.20E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 94	3.10E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 152
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+02mwd, flux= 2.93E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	Initial	25030. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
sr 94	2.87E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 94	4.60E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 94	2.32E+02	2.32E+02	2.32E+02	2.32E+02	2.32E+02	2.32E+02	2.32E+02	2.32E+02	2.32E+02	2.32E+02	2.32E+02
nb 94	3.94E-04	3.94E-04	3.81E-04	2.80E-04	1.99E-04	1.01E-04	5.08E-05	3.61E-05	2.57E-05	1.82E-05	1.30E-05
nb 94m	8.67E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
br 95	3.51E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 95	9.69E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 95	2.13E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 95	8.65E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 95	2.67E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 95	2.37E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 95	1.30E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 95m	1.49E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 95	2.33E+02	2.33E+02	2.33E+02	2.33E+02	2.33E+02	2.33E+02	2.33E+02	2.33E+02	2.33E+02	2.33E+02	2.33E+02
br 96	6.62E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
kr 96	6.66E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 96	2.84E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 96	2.71E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 96	2.40E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 96	2.41E+02	2.41E+02	2.41E+02	2.41E+02	2.41E+02	2.41E+02	2.41E+02	2.41E+02	2.41E+02	2.41E+02	2.41E+02
nb 96	8.36E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 96	7.28E+00	7.28E+00	7.28E+00	7.28E+00	7.28E+00	7.28E+00	7.28E+00	7.28E+00	7.28E+00	7.28E+00	7.28E+00
kr 97	2.97E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 97	7.49E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 97	5.57E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 97	1.17E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 97	2.46E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 97	1.76E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 97m	2.30E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 97	2.26E+02	2.26E+02	2.26E+02	2.26E+02	2.26E+02	2.26E+02	2.26E+02	2.26E+02	2.26E+02	2.26E+02	2.26E+02
kr 98	1.71E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rb 98	4.10E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 98	3.46E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 98	1.61E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 98	1.31E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 98	1.23E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

nb 98m	8.40E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 98	2.43E+02	2.43E+02	2.43E+02	2.43E+02	2.43E+02	2.43E+02	2.43E+02	2.43E+02	2.43E+02	2.43E+02	2.43E+02
tc 98	1.47E-03	1.47E-03	1.47E-03	1.47E-03	1.47E-03	1.46E-03	1.46E-03	1.46E-03	1.45E-03	1.45E-03	1.45E-03
rb 99	6.35E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr 99	6.32E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y 99	2.40E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr 99	8.83E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 99	4.08E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb 99m	2.88E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo 99	1.10E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc 99	2.21E+02	2.21E+02	2.20E+02	2.14E+02	2.07E+02	1.94E+02	1.81E+02	1.75E+02	1.70E+02	1.64E+02	1.59E+02
tc 99m	8.81E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru 99	1.83E+01	1.83E+01	1.90E+01	2.54E+01	3.23E+01	4.54E+01	5.78E+01	6.36E+01	6.93E+01	7.48E+01	8.01E+01
rb100	3.23E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr100	5.13E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y100	3.50E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 153
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+02mwd, flux= 2.93E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	25030. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
zr100	3.03E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb100	6.84E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb100m	8.62E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo100	2.74E+02	2.74E+02	2.74E+02	2.74E+02	2.74E+02	2.74E+02	2.74E+02	2.74E+02	2.74E+02	2.74E+02	2.74E+02
tc100	1.18E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru100	2.06E+01	2.06E+01	2.06E+01	2.06E+01	2.06E+01	2.06E+01	2.06E+01	2.06E+01	2.06E+01	2.06E+01	2.06E+01
rb101	2.56E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr101	8.04E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y101	1.40E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr101	4.82E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb101	2.82E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo101	3.64E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc101	3.54E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru101	2.27E+02	2.27E+02	2.27E+02	2.27E+02	2.27E+02	2.27E+02	2.27E+02	2.27E+02	2.27E+02	2.27E+02	2.27E+02
sr102	2.23E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y102	1.35E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr102	5.11E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb102	4.29E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo102	2.57E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102	2.00E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc102m	8.64E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru102	2.19E+02	2.19E+02	2.19E+02	2.19E+02	2.19E+02	2.19E+02	2.19E+02	2.19E+02	2.19E+02	2.19E+02	2.19E+02
rh102	1.19E-08	9.13E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd102	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr103	6.47E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y103	1.21E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr103	7.92E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb103	3.42E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo103	2.28E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc103	1.86E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru103	1.17E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh103	1.47E+02	1.47E+02	1.47E+02	1.47E+02	1.47E+02	1.47E+02	1.47E+02	1.47E+02	1.47E+02	1.47E+02	1.47E+02
rh103m	1.16E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sr104	2.79E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y104	1.16E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr104	4.28E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb104	4.52E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo104	1.46E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

tc104	2.80E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru104	1.45E+02	1.45E+02	1.45E+02	1.45E+02	1.45E+02	1.45E+02	1.45E+02	1.45E+02	1.45E+02	1.45E+02	1.45E+02
rh104	8.57E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh104m	3.85E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd104	4.53E+01	4.53E+01	4.53E+01	4.53E+01	4.53E+01	4.53E+01	4.53E+01	4.53E+01	4.53E+01	4.53E+01	4.53E+01
y105	1.70E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr105	3.13E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb105	1.08E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo105	5.91E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc105	8.84E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru105	3.14E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105	2.50E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh105m	2.51E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd105	1.06E+02	1.06E+02	1.06E+02	1.06E+02	1.06E+02	1.06E+02	1.06E+02	1.06E+02	1.06E+02	1.06E+02	1.06E+02

1

Part C 10000 year criticality at 2.182 kw/package fission products

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+02mwd, flux= 2.93E+08n/cm**2-sec

0

nuclide concentrations, grams

basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	25030. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
y106	1.86E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr106	1.82E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb106	5.38E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo106	6.76E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc106	4.35E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru106	4.28E-04	5.70E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106	3.98E-10	5.29E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh106m	4.50E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd106	8.28E+01	8.28E+01	8.28E+01	8.28E+01	8.28E+01	8.28E+01	8.28E+01	8.28E+01	8.28E+01	8.28E+01	8.28E+01
ag106	3.79E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
y107	1.76E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
zr107	4.85E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb107	6.75E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo107	1.00E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc107	1.57E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru107	2.06E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh107	1.20E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd107	5.31E+01	5.31E+01	5.31E+01	5.30E+01	5.30E+01	5.29E+01	5.27E+01	5.27E+01	5.26E+01	5.26E+01	5.25E+01
pd107m	1.74E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag107	1.37E-01	1.37E-01	1.43E-01	1.94E-01	2.50E-01	3.63E-01	4.76E-01	5.32E-01	5.88E-01	6.44E-01	7.00E-01
zr108	3.15E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb108	6.36E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo108	5.08E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc108	1.14E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru108	1.50E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108	9.39E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh108m	3.82E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd108	3.38E+01	3.38E+01	3.38E+01	3.38E+01	3.38E+01	3.38E+01	3.38E+01	3.38E+01	3.38E+01	3.38E+01	3.38E+01
ag108	4.10E-13	2.40E-16	1.20E-18	5.59E-40	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag108m	9.16E-08	7.77E-08	3.90E-10	1.81E-31	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd108	5.27E-04	5.27E-04	5.27E-04	5.27E-04	5.27E-04	5.27E-04	5.27E-04	5.27E-04	5.27E-04	5.27E-04	5.27E-04
zr109	8.84E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb109	3.67E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo109	5.10E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc109	1.05E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru109	1.37E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109	3.71E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh109m	1.16E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109	2.73E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd109m	9.08E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

ag109	2.25E+01	2.25E+01	2.25E+01	2.25E+01	2.25E+01	2.25E+01	2.25E+01	2.25E+01	2.25E+01	2.25E+01	2.25E+01
ag109m	2.19E-10	1.41E-24	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd109	1.92E-11	1.42E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb110	7.03E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo110	1.17E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc110	8.45E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru110	1.71E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110	7.29E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh110m	3.91E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd110	1.00E+01	1.00E+01	1.00E+01	1.00E+01	1.00E+01	1.00E+01	1.00E+01	1.00E+01	1.00E+01	1.00E+01	1.00E+01
ag110	7.52E-11	2.51E-27	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag110m	2.61E-06	1.62E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 155

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+02mwd, flux= 2.93E+08n/cm**2-sec

0 nuclide concentrations, grams

basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	25030. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
cd110	6.42E+00	6.42E+00	6.42E+00	6.42E+00	6.42E+00	6.42E+00	6.42E+00	6.42E+00	6.42E+00	6.42E+00	6.42E+00
nb111	8.59E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo111	2.18E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc111	4.25E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru111	5.98E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh111	8.85E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111	1.22E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd111m	9.00E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111	5.64E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag111m	5.65E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd111	5.25E+00	5.25E+00	5.25E+00	5.25E+00	5.25E+00	5.25E+00	5.25E+00	5.25E+00	5.25E+00	5.25E+00	5.25E+00
cd111m	4.30E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nb112	1.64E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo112	7.61E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc112	1.94E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru112	5.15E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh112	5.33E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd112	3.39E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag112	5.06E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd112	2.75E+00	2.75E+00	2.75E+00	2.75E+00	2.75E+00	2.75E+00	2.75E+00	2.75E+00	2.75E+00	2.75E+00	2.75E+00
mo113	3.75E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc113	8.32E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru113	1.55E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh113	1.66E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd113	2.60E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113	5.26E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag113m	3.75E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd113	2.67E-02	2.67E-02	2.67E-02	2.67E-02	2.67E-02	2.67E-02	2.67E-02	2.67E-02	2.67E-02	2.67E-02	2.67E-02
cd113m	2.92E-06	6.69E-07	1.31E-27	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in113	3.13E-02	3.13E-02	3.13E-02	3.13E-02	3.13E-02	3.13E-02	3.13E-02	3.13E-02	3.13E-02	3.13E-02	3.13E-02
in113m	1.73E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
mo114	3.20E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc114	4.48E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru114	1.79E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh114	1.79E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd114	3.58E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag114	1.16E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd114	3.07E+00	3.07E+00	3.07E+00	3.07E+00	3.07E+00	3.07E+00	3.07E+00	3.07E+00	3.07E+00	3.07E+00	3.07E+00
in114	5.65E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in114m	2.53E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn114	2.39E-04	2.39E-04	2.39E-04	2.39E-04	2.39E-04	2.39E-04	2.39E-04	2.39E-04	2.39E-04	2.39E-04	2.39E-04
mo115	4.84E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

tc115	2.25E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru115	4.91E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh115	3.95E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd115	6.03E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115	1.50E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag115m	9.36E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115	3.40E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd115m	3.20E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in115	4.61E-01	4.61E-01	4.61E-01	4.61E-01	4.61E-01	4.61E-01	4.61E-01	4.61E-01	4.61E-01	4.61E-01	4.61E-01
in115m	2.86E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 156
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+02mwd, flux= 2.93E+08n/cm**2-sec
0
nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	25030. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
sn115	4.75E-02	4.75E-02	4.75E-02	4.75E-02	4.75E-02	4.75E-02	4.75E-02	4.75E-02	4.75E-02	4.75E-02	4.75E-02
tc116	4.16E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru116	3.41E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh116	2.55E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd116	2.47E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116	3.53E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag116m	2.59E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd116	1.36E+00	1.36E+00	1.36E+00	1.36E+00	1.36E+00	1.36E+00	1.36E+00	1.36E+00	1.36E+00	1.36E+00	1.36E+00
in116	5.29E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in116m	4.58E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn116	5.16E-01	5.16E-01	5.16E-01	5.16E-01	5.16E-01	5.16E-01	5.16E-01	5.16E-01	5.16E-01	5.16E-01	5.16E-01
tc117	6.82E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru117	1.08E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh117	1.27E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd117	6.37E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117	7.75E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag117m	5.69E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117	1.67E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd117m	5.05E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117	3.63E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in117m	1.19E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn117	1.24E+00	1.24E+00	1.24E+00	1.24E+00	1.24E+00	1.24E+00	1.24E+00	1.24E+00	1.24E+00	1.24E+00	1.24E+00
sn117m	1.39E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tc118	1.10E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru118	3.46E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh118	8.04E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd118	1.95E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118	4.00E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag118m	1.51E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd118	5.53E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118	9.16E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in118m	5.45E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn118	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00	1.01E+00
ru119	1.36E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
rh119	4.68E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd119	6.83E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag119	2.78E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119	2.16E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd119m	7.90E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119	1.12E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in119m	1.31E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn119	1.08E+00	1.08E+00	1.08E+00	1.08E+00	1.08E+00	1.08E+00	1.08E+00	1.08E+00	1.08E+00	1.08E+00	1.08E+00
sn119m	3.99E-08	2.21E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ru120	3.07E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

rh120	3.79E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd120	7.95E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag120	1.01E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd120	9.39E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120	5.79E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in120m	1.35E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn120	1.05E+00	1.05E+00	1.05E+00	1.05E+00	1.05E+00	1.05E+00	1.05E+00	1.05E+00	1.05E+00	1.05E+00	1.05E+00
rh121	1.55E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 157
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+02mwd, flux= 2.93E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	25030. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
pd121	5.66E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag121	5.14E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd121	2.56E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121	3.80E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in121m	4.50E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn121	2.02E-08	1.10E-10	5.39E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn121m	3.67E-06	2.52E-06	1.24E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb121	1.09E+00	1.09E+00	1.09E+00	1.09E+00	1.09E+00	1.09E+00	1.09E+00	1.09E+00	1.09E+00	1.09E+00	1.09E+00
rh122	7.42E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd122	4.16E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag122	1.61E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd122	1.08E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122	3.39E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in122m	2.17E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn122	1.37E+00	1.37E+00	1.37E+00	1.37E+00	1.37E+00	1.37E+00	1.37E+00	1.37E+00	1.37E+00	1.37E+00	1.37E+00
sb122	5.16E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb122m	5.59E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te122	5.13E-02	5.13E-02	5.13E-02	5.13E-02	5.13E-02	5.13E-02	5.13E-02	5.13E-02	5.13E-02	5.13E-02	5.13E-02
rh123	7.99E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd123	1.56E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag123	5.34E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd123	1.19E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123	9.84E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in123m	2.16E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123	2.16E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn123m	5.32E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb123	1.28E+00	1.28E+00	1.28E+00	1.28E+00	1.28E+00	1.28E+00	1.28E+00	1.28E+00	1.28E+00	1.28E+00	1.28E+00
te123	4.02E-04	4.02E-04	4.02E-04	4.02E-04	4.02E-04	4.02E-04	4.02E-04	4.02E-04	4.02E-04	4.02E-04	4.02E-04
te123m	1.52E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd124	1.48E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag124	2.74E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd124	1.95E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in124	1.22E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn124	2.30E+00	2.30E+00	2.30E+00	2.30E+00	2.30E+00	2.30E+00	2.30E+00	2.30E+00	2.30E+00	2.30E+00	2.30E+00
sb124	9.26E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb124m	3.29E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te124	4.36E-02	4.36E-02	4.36E-02	4.36E-02	4.36E-02	4.36E-02	4.36E-02	4.36E-02	4.36E-02	4.36E-02	4.36E-02
pd125	1.18E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag125	1.79E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd125	2.19E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125	5.13E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in125m	1.99E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125	1.05E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn125m	2.21E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb125	4.43E-05	2.18E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te125	2.80E+00	2.80E+00	2.80E+00	2.80E+00	2.80E+00	2.80E+00	2.80E+00	2.80E+00	2.80E+00	2.80E+00	2.80E+00

te125m	5.94E-07	3.10E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pd126	4.00E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag126	3.06E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd126	8.07E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in126	7.10E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn126	4.32E+00	4.32E+00	4.29E+00	4.03E+00	3.76E+00	3.27E+00	2.85E+00	2.66E+00	2.48E+00	2.31E+00	2.16E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 158

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+02mwd, flux= 2.93E+08n/cm**2-sec

0

nuclide concentrations, grams

basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	25030. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
sb126	2.11E-07	2.05E-07	2.04E-07	1.91E-07	1.79E-07	1.55E-07	1.35E-07	1.26E-07	1.18E-07	1.10E-07	1.03E-07
sb126m	1.57E-09	1.56E-09	1.55E-09	1.45E-09	1.36E-09	1.18E-09	1.03E-09	9.60E-10	8.95E-10	8.35E-10	7.80E-10
te126	8.68E-01	8.69E-01	8.98E-01	1.16E+00	1.43E+00	1.91E+00	2.34E+00	2.53E+00	2.70E+00	2.87E+00	3.03E+00
xe126	1.38E-09	1.38E-09	1.38E-09	1.38E-09	1.38E-09	1.38E-09	1.38E-09	1.38E-09	1.38E-09	1.38E-09	1.38E-09
ag127	2.13E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd127	6.99E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127	5.25E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in127m	1.72E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127	6.53E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn127m	2.95E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb127	7.23E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127	7.30E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te127m	3.59E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i127	1.16E+01	1.16E+01	1.16E+01	1.16E+01	1.16E+01	1.16E+01	1.16E+01	1.16E+01	1.16E+01	1.16E+01	1.16E+01
xe127	2.62E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ag128	5.91E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd128	1.37E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in128	8.94E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn128	1.47E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128	1.29E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb128m	2.71E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te128	2.54E+01	2.54E+01	2.54E+01	2.54E+01	2.54E+01	2.54E+01	2.54E+01	2.54E+01	2.54E+01	2.54E+01	2.54E+01
i128	3.12E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe128	4.37E-01	4.37E-01	4.37E-01	4.37E-01	4.37E-01	4.37E-01	4.37E-01	4.37E-01	4.37E-01	4.37E-01	4.37E-01
cd129	1.94E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in129	6.81E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129	4.72E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn129m	1.57E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb129	1.50E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129	3.75E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te129m	5.23E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i129	5.19E+01	5.19E+01	5.19E+01	5.19E+01	5.19E+01	5.18E+01	5.18E+01	5.18E+01	5.17E+01	5.17E+01	5.17E+01
xe129	5.67E-02	5.68E-02	5.90E-02	7.96E-02	1.03E-01	1.48E-01	1.94E-01	2.17E-01	2.40E-01	2.63E-01	2.85E-01
xe129m	3.71E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cd130	1.19E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in130	2.98E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn130	2.48E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130	7.40E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb130m	5.54E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te130	1.06E+02	1.06E+02	1.06E+02	1.06E+02	1.06E+02	1.06E+02	1.06E+02	1.06E+02	1.06E+02	1.06E+02	1.06E+02
i130	2.26E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i130m	1.46E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe130	1.28E+00	1.28E+00	1.28E+00	1.28E+00	1.28E+00	1.28E+00	1.28E+00	1.28E+00	1.28E+00	1.28E+00	1.28E+00
cd131	4.05E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in131	1.05E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn131	3.68E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb131	3.58E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te131	4.08E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

te131m	6.04E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i131	2.20E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe131	1.42E+02	1.42E+02	1.42E+02	1.42E+02	1.42E+02	1.42E+02	1.42E+02	1.42E+02	1.42E+02	1.42E+02	1.42E+02
xe131m	3.57E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 159
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+02mwd, flux= 2.93E+08n/cm**2-sec
0
nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	25030. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
cd132	6.38E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in132	1.98E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn132	3.04E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132	3.69E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb132m	2.61E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te132	1.30E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i132	3.86E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe132	2.98E+02	2.98E+02	2.98E+02	2.98E+02	2.98E+02	2.98E+02	2.98E+02	2.98E+02	2.98E+02	2.98E+02	2.98E+02
cs132	6.33E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba132	5.34E-05	5.34E-05	5.34E-05	5.34E-05	5.34E-05	5.34E-05	5.34E-05	5.34E-05	5.34E-05	5.34E-05	5.34E-05
in133	3.59E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn133	3.15E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb133	3.42E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133	2.84E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te133m	1.03E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133	5.12E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i133m	4.32E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133	3.11E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe133m	3.97E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs133	3.53E+02	3.53E+02	3.53E+02	3.53E+02	3.53E+02	3.53E+02	3.53E+02	3.53E+02	3.53E+02	3.53E+02	3.53E+02
ba133	1.81E-12	2.51E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
in134	4.35E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn134	3.76E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134	3.71E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb134m	3.06E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te134	1.62E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134	2.45E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i134m	1.23E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe134	4.45E+02	4.45E+02	4.45E+02	4.45E+02	4.45E+02	4.45E+02	4.45E+02	4.45E+02	4.45E+02	4.45E+02	4.45E+02
xe134m	3.35E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134	8.87E-04	3.70E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs134m	1.09E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba134	3.26E+01	3.26E+01	3.26E+01	3.26E+01	3.26E+01	3.26E+01	3.26E+01	3.26E+01	3.26E+01	3.26E+01	3.26E+01
sn135	1.31E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb135	3.22E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te135	6.34E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i135	1.55E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135	2.32E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe135m	1.24E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs135	1.91E+02	1.91E+02	1.91E+02	1.90E+02	1.90E+02	1.89E+02	1.88E+02	1.87E+02	1.86E+02	1.86E+02	1.85E+02
cs135m	7.51E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba135	1.41E+00	1.41E+00	1.47E+00	1.99E+00	2.56E+00	3.70E+00	4.83E+00	5.40E+00	5.96E+00	6.52E+00	7.08E+00
ba135m	1.78E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sn136	2.00E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb136	2.43E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te136	2.77E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136	2.65E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i136m	6.99E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe136	5.76E+02	5.76E+02	5.76E+02	5.76E+02	5.76E+02	5.76E+02	5.76E+02	5.76E+02	5.76E+02	5.76E+02	5.76E+02
cs136	2.10E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

ba136	5.17E+00	5.17E+00	5.17E+00	5.17E+00	5.17E+00	5.17E+00	5.17E+00	5.17E+00	5.17E+00	5.17E+00	5.17E+00
ba136m	6.37E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 160
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+02mwd, flux= 2.93E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	25030. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
sb137	1.86E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te137	1.87E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i137	8.14E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe137	1.46E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs137	6.31E-02	3.16E-02	5.82E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba137	3.75E+02	3.75E+02	3.75E+02	3.75E+02	3.75E+02	3.75E+02	3.75E+02	3.75E+02	3.75E+02	3.75E+02	3.75E+02
ba137m	9.64E-09	4.82E-09	8.88E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sb138	7.12E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te138	1.76E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i138	1.09E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe138	5.27E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138	1.29E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs138m	4.15E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba138	3.80E+02	3.80E+02	3.80E+02	3.80E+02	3.80E+02	3.80E+02	3.80E+02	3.80E+02	3.80E+02	3.80E+02	3.80E+02
la138	2.28E-03	2.28E-03	2.28E-03	2.28E-03	2.28E-03	2.28E-03	2.28E-03	2.28E-03	2.28E-03	2.28E-03	2.28E-03
sb139	6.94E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te139	1.18E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i139	2.12E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe139	1.93E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs139	3.52E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba139	3.29E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la139	3.61E+02	3.61E+02	3.61E+02	3.61E+02	3.61E+02	3.61E+02	3.61E+02	3.61E+02	3.61E+02	3.61E+02	3.61E+02
ce139	4.65E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr139	3.47E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te140	2.77E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i140	1.88E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe140	4.76E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs140	3.67E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba140	7.12E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la140	9.55E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce140	3.81E+02	3.81E+02	3.81E+02	3.81E+02	3.81E+02	3.81E+02	3.81E+02	3.81E+02	3.81E+02	3.81E+02	3.81E+02
pr140	1.56E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te141	9.78E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i141	1.32E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe141	2.32E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs141	1.12E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba141	6.56E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la141	8.50E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce141	1.69E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr141	3.34E+02	3.34E+02	3.34E+02	3.34E+02	3.34E+02	3.34E+02	3.34E+02	3.34E+02	3.34E+02	3.34E+02	3.34E+02
nd141	8.81E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
te142	7.77E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
i142	1.38E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe142	6.44E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs142	4.51E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba142	3.69E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la142	3.27E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce142	3.36E+02	3.36E+02	3.36E+02	3.36E+02	3.36E+02	3.36E+02	3.36E+02	3.36E+02	3.36E+02	3.36E+02	3.36E+02
pr142	1.11E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr142m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd142	3.57E+00	3.57E+00	3.57E+00	3.57E+00	3.57E+00	3.57E+00	3.57E+00	3.57E+00	3.57E+00	3.57E+00	3.57E+00
i143	3.81E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 161

decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+02mwd, flux= 2.93E+08n/cm**2-sec

0 nuclide concentrations, grams

basis =B&W 15x15, 3.00wtX, 20gwd/mtu /per assem

	initial	25030. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
xe143	7.48E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs143	2.51E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba143	7.44E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la143	4.96E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce143	7.00E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr143	6.90E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd143	2.77E+02	2.77E+02	2.77E+02	2.77E+02	2.77E+02	2.77E+02	2.77E+02	2.77E+02	2.77E+02	2.77E+02	2.77E+02
i144	5.59E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe144	1.83E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs144	4.06E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba144	4.74E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la144	2.16E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce144	1.33E-03	3.51E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144	5.58E-08	1.48E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr144m	3.26E-10	8.63E-22	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd144	3.59E+02	3.59E+02	3.59E+02	3.59E+02	3.59E+02	3.59E+02	3.59E+02	3.59E+02	3.59E+02	3.59E+02	3.59E+02
i145	2.35E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe145	1.46E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs145	5.60E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba145	7.91E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la145	9.02E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce145	7.26E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr145	8.67E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd145	2.11E+02	2.11E+02	2.11E+02	2.11E+02	2.11E+02	2.11E+02	2.11E+02	2.11E+02	2.11E+02	2.11E+02	2.11E+02
pm145	1.53E-07	4.97E-08	1.58E-24	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm145	7.89E-09	1.57E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
xe146	8.47E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs146	7.92E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba146	2.21E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la146	1.52E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce146	2.57E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr146	4.62E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd146	1.95E+02	1.95E+02	1.95E+02	1.95E+02	1.95E+02	1.95E+02	1.95E+02	1.95E+02	1.95E+02	1.95E+02	1.95E+02
pm146	9.66E-10	2.25E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm146	3.21E-03	3.21E-03	3.21E-03	3.21E-03	3.21E-03	3.21E-03	3.21E-03	3.21E-03	3.21E-03	3.21E-03	3.21E-03
xe147	9.53E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs147	2.56E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba147	1.07E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la147	4.45E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce147	1.34E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr147	2.02E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd147	2.37E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm147	2.07E-03	7.55E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm147	9.34E+01	9.34E+01	9.34E+01	9.34E+01	9.34E+01	9.34E+01	9.34E+01	9.34E+01	9.34E+01	9.34E+01	9.34E+01
cs148	1.77E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba148	1.82E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la148	3.31E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce148	9.38E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr148	2.58E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd148	1.07E+02	1.07E+02	1.07E+02	1.07E+02	1.07E+02	1.07E+02	1.07E+02	1.07E+02	1.07E+02	1.07E+02	1.07E+02
pm148	1.33E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm148m	1.03E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+02mwd, flux= 2.93E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	25030. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
sm148	3.06E+01	3.06E+01	3.06E+01	3.06E+01	3.06E+01	3.06E+01	3.06E+01	3.06E+01	3.06E+01	3.06E+01	3.06E+01
cs149	1.76E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba149	2.32E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la149	2.14E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce149	4.48E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr149	1.72E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd149	8.37E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm149	2.58E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm149	6.96E-01	6.96E-01	6.96E-01	6.96E-01	6.96E-01	6.96E-01	6.96E-01	6.96E-01	6.96E-01	6.96E-01	6.96E-01
eu149	1.68E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
cs150	1.15E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba150	2.92E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la150	8.72E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce150	1.48E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr150	4.70E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd150	5.04E+01	5.04E+01	5.04E+01	5.04E+01	5.04E+01	5.04E+01	5.04E+01	5.04E+01	5.04E+01	5.04E+01	5.04E+01
pm150	3.73E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm150	8.32E+01	8.32E+01	8.32E+01	8.32E+01	8.32E+01	8.32E+01	8.32E+01	8.32E+01	8.32E+01	8.32E+01	8.32E+01
eu150	2.92E-08	1.64E-08	1.14E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ba151	1.03E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la151	1.77E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce151	1.05E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr151	7.26E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd151	4.73E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm151	6.56E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm151	3.06E-02	2.43E-02	1.38E-05	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu151	5.60E+00	5.60E+00	5.63E+00	5.63E+00	5.63E+00	5.63E+00	5.63E+00	5.63E+00	5.63E+00	5.63E+00	5.63E+00
ba152	2.82E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la152	5.76E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce152	7.40E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr152	7.76E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd152	2.79E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152	1.04E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm152m	6.24E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm152	3.79E+01	3.79E+01	3.79E+01	3.79E+01	3.79E+01	3.79E+01	3.79E+01	3.79E+01	3.79E+01	3.79E+01	3.79E+01
eu152	3.58E-03	7.52E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu152m	1.55E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd152	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00	1.31E+00
la153	6.68E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce153	7.22E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr153	2.31E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd153	1.56E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm153	8.94E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm153	2.21E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu153	2.84E+01	2.84E+01	2.84E+01	2.84E+01	2.84E+01	2.84E+01	2.84E+01	2.84E+01	2.84E+01	2.84E+01	2.84E+01
gd153	1.13E-06	2.49E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
la154	8.03E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce154	1.01E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr154	9.51E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd154	4.15E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154	1.34E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm154m	4.24E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+02mwd, flux= 2.93E+08n/cm**2-sec
0 nuclide concentrations, grams

basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

	initial	25030. yr	26000. yr	35000. yr	45000. yr	65000. yr	85000. yr	95000. yr	105000. yr	115000. yr	125000. yr
sm154	9.44E+00	9.44E+00	9.44E+00	9.44E+00	9.44E+00	9.44E+00	9.44E+00	9.44E+00	9.44E+00	9.44E+00	9.44E+00
eu154	1.88E-03	1.67E-04	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd154	9.29E+00	9.30E+00	9.30E+00	9.30E+00	9.30E+00	9.30E+00	9.30E+00	9.30E+00	9.30E+00	9.30E+00	9.30E+00
la155	4.23E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ce155	2.35E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr155	2.27E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd155	6.24E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm155	3.73E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm155	1.28E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu155	1.42E-04	1.67E-06	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd155	7.60E-01	7.60E-01	7.60E-01	7.60E-01	7.60E-01	7.60E-01	7.60E-01	7.60E-01	7.60E-01	7.60E-01	7.60E-01
ce156	2.08E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr156	1.04E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd156	2.14E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm156	4.60E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm156	1.86E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu156	7.30E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd156	1.21E+01	1.21E+01	1.21E+01	1.21E+01	1.21E+01	1.21E+01	1.21E+01	1.21E+01	1.21E+01	1.21E+01	1.21E+01
ce157	3.64E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pr157	1.68E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd157	6.43E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm157	8.53E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm157	1.53E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu157	1.81E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd157	1.55E-02	1.55E-02	1.55E-02	1.55E-02	1.55E-02	1.55E-02	1.55E-02	1.55E-02	1.55E-02	1.55E-02	1.55E-02
pr158	4.04E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd158	1.21E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm158	1.26E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm158	5.03E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu158	4.81E-10	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd158	3.41E+00	3.41E+00	3.41E+00	3.41E+00	3.41E+00	3.41E+00	3.41E+00	3.41E+00	3.41E+00	3.41E+00	3.41E+00
pr159	1.88E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
nd159	2.67E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm159	2.02E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm159	9.01E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu159	8.96E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd159	7.28E-09	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb159	5.22E-01	5.22E-01	5.22E-01	5.22E-01	5.22E-01	5.22E-01	5.22E-01	5.22E-01	5.22E-01	5.22E-01	5.22E-01
nd160	2.19E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm160	5.54E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm160	1.16E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu160	1.48E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd160	2.34E-01	2.34E-01	2.34E-01	2.34E-01	2.34E-01	2.34E-01	2.34E-01	2.34E-01	2.34E-01	2.34E-01	2.34E-01
tb160	1.70E-07	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy160	4.34E-02	4.34E-02	4.34E-02	4.34E-02	4.34E-02	4.34E-02	4.34E-02	4.34E-02	4.34E-02	4.34E-02	4.34E-02
nd161	3.62E-19	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
pm161	7.48E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm161	1.48E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu161	5.20E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd161	4.07E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb161	1.11E-08	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00

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Part C 10000 year criticality at 2.182 kw/package fission products page 164
decay, following reactor irradiation identified by: power= 1.039E-04mw, burnup=3.7952E+02mwd, flux= 2.93E+08n/cm**2-sec
0 nuclide concentrations, grams
basis =B&W 15x15, 3.00wt%, 20gwd/mtu /per assem

initial 25030. yr 26000. yr 35000. yr 45000. yr 65000. yr 85000. yr 95000. yr 105000. yr 115000. yr 125000. yr

dy161	8.43E-02	8.43E-02	8.43E-02	8.43E-02	8.43E-02	8.43E-02	8.43E-02	8.43E-02	8.43E-02	8.43E-02	8.43E-02
pm162	2.11E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
sm162	2.76E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu162	5.38E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd162	4.26E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162	4.02E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb162m	1.42E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy162	5.92E-02	5.92E-02	5.92E-02	5.92E-02	5.92E-02	5.92E-02	5.92E-02	5.92E-02	5.92E-02	5.92E-02	5.92E-02
sm163	5.25E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu163	4.75E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd163	2.77E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163	4.09E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb163m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy163	3.93E-02	3.93E-02	3.93E-02	3.93E-02	3.93E-02	3.93E-02	3.93E-02	3.93E-02	3.93E-02	3.93E-02	3.93E-02
sm164	4.39E-18	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu164	1.11E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd164	1.16E-12	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb164	2.31E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy164	1.06E-02	1.06E-02	1.06E-02	1.06E-02	1.06E-02	1.06E-02	1.06E-02	1.06E-02	1.06E-02	1.06E-02	1.06E-02
sm165	7.70E-20	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
eu165	1.10E-17	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
gd165	8.15E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tb165	5.70E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165	5.52E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
dy165m	3.75E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho165	1.07E-02	1.07E-02	1.07E-02	1.07E-02	1.07E-02	1.07E-02	1.07E-02	1.07E-02	1.07E-02	1.07E-02	1.07E-02
dy166	2.40E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166	9.61E-11	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
ho166m	5.59E-07	5.50E-07	3.14E-07	1.73E-09	5.37E-12	5.16E-17	4.96E-22	1.54E-24	4.76E-27	1.48E-29	4.58E-32
er166	1.77E-03	1.77E-03	1.77E-03	1.77E-03	1.77E-03	1.77E-03	1.77E-03	1.77E-03	1.77E-03	1.77E-03	1.77E-03
er167	2.83E-05	2.83E-05	2.83E-05	2.83E-05	2.83E-05	2.83E-05	2.83E-05	2.83E-05	2.83E-05	2.83E-05	2.83E-05
er167m	6.16E-21	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er168	2.43E-05	2.43E-05	2.43E-05	2.43E-05	2.43E-05	2.43E-05	2.43E-05	2.43E-05	2.43E-05	2.43E-05	2.43E-05
yb168	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er169	1.16E-13	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm169	7.75E-07	7.75E-07	7.75E-07	7.75E-07	7.75E-07	7.75E-07	7.75E-07	7.75E-07	7.75E-07	7.75E-07	7.75E-07
yb169	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
er170	8.24E-07	8.24E-07	8.24E-07	8.24E-07	8.24E-07	8.24E-07	8.24E-07	8.24E-07	8.24E-07	8.24E-07	8.24E-07
tm170	1.01E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm170m	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb170	4.84E-09	4.84E-09	4.84E-09	4.84E-09	4.84E-09	4.84E-09	4.84E-09	4.84E-09	4.84E-09	4.84E-09	4.84E-09
er171	5.31E-15	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm171	1.22E-11	2.41E-16	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb171	1.10E-06	1.10E-06	1.10E-06	1.10E-06	1.10E-06	1.10E-06	1.10E-06	1.10E-06	1.10E-06	1.10E-06	1.10E-06
er172	2.07E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
tm172	2.82E-14	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00	.00E+00
yb172	7.02E-07	7.02E-07	7.02E-07	7.02E-07	7.02E-07	7.02E-07	7.02E-07	7.02E-07	7.02E-07	7.02E-07	7.02E-07
total	9.97E+03	9.97E+03	9.97E+03	9.97E+03	9.97E+03	9.97E+03	9.97E+03	9.97E+03	9.97E+03	9.97E+03	9.97E+03

1

1broad group parameters

grp	upper energy	mid energy	velocity	fiss spec
1	2.0000E+07	2.6656E+06	1.9708E+09	7.2287E-01
2	9.0000E+05	1.5177E+05	1.0210E+07	2.7713E-01
3	4.0000E-01	1.2448E-01	3.6380E+05	1.2042E-10
4	1.0000E-05			

1 1200 d, second part of sas2h pass to make library

0cell averaged fluxes

0zone	grp. 1	grp. 2	grp. 3
1	3.92924E-01	1.13410E+00	2.09377E-01
2	3.98193E-01	1.13511E+00	2.00378E-01
3	4.01162E-01	1.13526E+00	1.96343E-01
4	4.18364E-01	1.13645E+00	1.67443E-01
5	4.16670E-01	1.13631E+00	1.70246E-01